INDITEX

i+FCM

Inditex Precautions and Limits for Users Safety for Food Contact Materials

2021

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for Food Contact Materials

INDEX

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I. DEFINITION AND SCOPE

i+FCM

Inditex Precautions and Limits for Users Safety for Food Contact Materials

DEFINITION OF INDITEX PRECAUTIONS AND LIMITS FOR USERS SAFETY FOR FOOD CONTACT MATERIALS

Inditex Precautions and Limits for Users Safety for Food Contact Materials (hereinafter, i+FCM) is defined as a product health and safety standard that:

- Has been developed by Inditex in conformity with the legislations of the main markets in which it has commercial presence, including, but not limited to, the European Union (EU), including specific regulations of Germany, France, Finland, Italy and Netherlands; Canada; United States of America (USA); People's Republic of China (China); Japan; The Republic of Turkey (Turkey); the Republic of Korea (South Korea); Taiwan; MERCOSUR; Colombia; Mexico; The Cooperation Council for the Arab States (GCC); Israel and Eurasian Economic Union (the Russian Federation, the Republic of Belarus, the Republic of Kazakhstan, the Republic of Kyrgyz and the Republic of Armenia).

- Regulates those 'substances and parameters the use of which is legally limited' and which, if present in the products above certain levels, could be hazardous for human health.

- i+FCM is of general and mandatory application for all types of food contact materials (*i.e.* plastic, rubber, silicone, ceramic, glass, metals and alloys, paper and board, natural wood, natural cork and other natural materials and organic and/or inorganic coatings) used in articles that are intended to be used for serving and eating meals (*i.e.* tableware products) or for cooking, baking, preparing and storing foodstuffs (*i.e.* kitchenware products).

- The Supplier is the only party responsible for the compliance of the products supplied to Inditex with i+FCM.

In this document, a detailed study and review of the most important regulations worldwide is gathered, to provide a general understanding about product health compliance. If you, as an Inditex supplier, are using materials not mentioned in this Standard, please contact Inditex Sustainability department (i+fcm@inditex.com) to get further information on how to achieve compliance of your products with Inditex requirements for Food Contact Materials.

Inditex has made all reasonable efforts to ensure the accuracy of all the information provided in this Standard. However, the information contained in, or accessed through, this document is provided by Inditex for general guidance purposes only and it should not be considered or used as a substitute for any legal requirement. It is the supplier's responsibility to comply with the applicable regulations of the countries where Inditex commercializes its products.

Finally, and regardless of the commitment accepted by the Supplier to control the parameters regulated in i+FCM, Inditex will verify its correct implementation at any phase of the manufacturing process by carrying out 'Routine' and 'Random Sample' analysis on selected 'Models/Quality'.

Definition of Food Contact Material[1]

It is considered to be a Food Contact Material (hereinafter, FCM) any kind of material and article which, in its finished state:

- Is intended to become in contact with food or

- is already in contact with food and was intended for that purpose or

- can reasonably be expected to come into contact with food or to transfer any of its constituents to food, under normal or predictable conditions of use.

Definition of tableware

Within the scope of this Standard, it is considered to be a tableware any article or utensil (*e.g.* dinnerware, cutlery, drinkware, serveware, picnicware, etc.) used for serving and eating meals.[2]

1 Regulation (EC) No. 1935-2004. Other countries and regions have similar definitions for food contact material.
2 See product type examples in section V. A. 10. 2.

Definition of kitchenware

Within the scope of this Standard, it is considered to be a kitchenware, any type of article, equipment or utensil which is intended to be used for baking, cooking, preparing and storing foodstuffs.[3]

3 See product type examples in section V. B. 7. 2.

II. INDITEX OVERALL REQUIREMENTS

i+FCM

Inditex Precautions and Limits for Users Safety for Food Contact Materials

Inditex overall requirements

All FCM sold by Inditex S.A. worldwide must comply, among other regulations, with the Regulation (EC) No. 1935/2004 on materials and articles intended to come into contact with food, and with the European Union Commission Regulation No. 2023/2006 of 22 December 2006, and its amendments, on good manufacturing practices[4] (hereinafter, GMP) for materials and articles intended to come into contact with food.

The purpose of these regulations is to guarantee that in normal or predictable conditions of usage, none of their constituent substances will be transferred to food in quantities that may:

- Become harmful for human health.
- Represent an unacceptable modification of the food composition.
- Disrupt any organoleptic characteristics of the food.

Inditex requirements to manufacturers include, but are not limited to, the following conditions:

- Conformity with good manufacturing practice.
- Quality assurance and quality control system.

All manufacturers shall establish and maintain an effective and properly documented quality control system.

The Supplier shall notify to the Inditex Sustainability Department all the polymeric resins, monomers, additives and colorants used in the production process of the Inditex food contact products made of plastic, silicone or coated with organic coatings. To facilitate this task, the Supplier is welcomed to use the template included in part 10 of Annex II.

The Supplier shall notify to the Inditex Sustainability Department the stainless steel grades used in the production process of the Inditex food contact products made of stainless steel.

Regardless of the commitment accepted by the Supplier to control the parameters and conditions regulated in i+FCM, Inditex will verify its correct implementation at any phase of the manufacturing process, and will audit the factories at any time in order to ensure the total compliance with the GMP regulation.

4 Regulation (EC) No. 2023/2006 ensures that the manufacturing process must be well controlled so that the specifications for FCMs remain in conformity with the legislation:

– premises fit for purpose and staff awareness of critical production stages,

– documented quality assurance and quality control systems maintained at the premises, and

– selection of suitable starting materials for the manufacturing process to ensure the safety and inertness of the final articles.

Good manufacturing rules apply to all stages in the manufacturing chain of food contact materials, although the production of starting materials is covered by other legislation.

III. GLOSSARY

ABS	Acrylonitrile-butadiene-styrene copolymer
AS	Acrylonitrile-styrene copolymer
BHT	Butyl hydroxytoluene
BPA	Bisphenol A
BR	Butadiene rubber
E/NB	Ethylene and bicyclo (2,2,1) hept-2-ene copolymer
ETFE	Ethylene tetrafluoroethylene
EtOH	Ethanol
EVA (*i.e.* PEVA)	Ethylene-vinylacetate copolymer
EVOH	Ethylene-vinyl alcohol copolymer
FEP	Polyfluoroethylene-propylene resin
FCM	Food Contact Materials
FDA	Food and Drugs Administration
Food simulant A	Ethanol 10 % (v/v)
Food simulant B	European Union: Acetic acid 3 % (v/v) China: Acetic acid 4 % (v/v)
Food simulant C	Ethanol 20 % (v/v)
Food simulant D1	Ethanol 50 % (v/v)
Food simulant D2	Any vegetable oil containing less than 1 % unsaponificable matter
Food simulant E	Poly(2,6-diphenyl-p-phenylene oxide), particle size 60-80 mesh, pore size 200 nm.
GMP	Good Manufacturing Practices
HB	Hydroxybutyric
HOAc	Acetic acid
IR	Isoprene Rubber
LCP	Liquid crystal polymer
LOD	Limit of Detection
MF	Melamine formaldehyde resin
NA	Not applicable
NBR	Nitrile Rubber (Acrylonitrile–butadiene rubber)
nd	No detection
OM	Overall Migration
PA	Polyamide
PAA	Primary Aromatic Amines
PAAM	Polyacrylamide
PAHs	Polycyclic Aromatic Hydrocarbons
PAN	Polyacrylonitrile
PB-1	Poly-1-butene
PBAT	Polybuthylene adipate terephthalate
PBS or PBSU	Polybutylene succinate

Continued on next page

PBT	Poly(butylene terephthalate)
PC	Polycarbonate
PCCD	1,4-cyclohexanedicarboxylic acid, dimethyl ester, polymer with 1,4-cyclohexanedimethanol
PCT	Poly(cyclohexane-1,4-dimethylene terephthalate)
PE	Polyethylene
PEEK	Polyetheretherketone
PEI	Polyetherimide
PESU	Polyethersulphone
PET	Poly(ethyleneterephthalate)
PETG	Polyethylene Terephthalate Glycol modified
PFA	Perfluoroalkoxy alkane
PLA	Polylactic acid
PMMA	Polymethylmethacrylate
PMP	Polymethylpentene
POM	Polyoxymethylene
PP	Polypropylene
PPA	Polymer production aid
PPE	Poly(phenylene ether)
PPSU	Polyphenylsulphone
PS	Polystyrene
PSU	Polysulphone
PTFE	Polytetrafluoroethylene
PTT	Polytrimethylene terephthalate
PU or PUR	Polyurethane
PVA or PVOH	Poly(vinylalcohol)
PVC	Poly(vinyl chloride)
PVCD	Poly(vinylidene chloride)
PVDF	Polyvinylidene fluoride
QMA	Maximum residue quantity
SML	Specific Migration Limit
TPC-ET	Thermoplastic polyester elastomer
TPE	Tetrafluoroethylene
UP or UPR	Unsaturated polyester resin
VOM	Volatile organic matter (amount of volatile organic compounds released from the material)

IV. SUBSTANCES AND PARAMETERS REGULATED

IV. A. PRODUCT HEALTH REQUIREMENTS

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IV. A. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF FCM

1. What are they?

FCM belong to a special category of consumer products, since they may have significant and direct impact on consumers' health. According to it, and unlike most other consumer products, only a list of permitted substances can be used to manufacture of food contact materials.[5]

2. How are they regulated?

All raw materials used to manufacture food contact products must be included in the lists of permitted substances, hereinafter positive lists. Most countries have developed their own positive lists.

3. How are they analysed?

The detailed and complete formulation of the product is required for this analysis. Every component in the formulation must be crosschecked with the corresponding positive lists and any substance out of the scope of the applicable positive lists will be marked and a "non compliance" result will be issued.

4. How can you comply?

By applying a proper selection of raw materials and additives, according to the positive list.[5]

5 To check the applicable positive lists, see the regulations enclosed in Annex I according to the type of material used in the manufacture of the food contact product.

IV. A. 2. OVERALL MIGRATION

1. What is it?

Overall migration (hereinafter, OM), also known in some countries as total migration, evaporation residue and/or total extractive, measures the total amount of substances migrated out of the food contact product under specified test conditions. It is an important indicator of the quality of the product. Each country/region adopts different terms and establishes its own regulations for this parameter.

2. Where can it be found?

The overall migration shall be determined in most food contact materials, including plastics, rubber, silicone rubber, ceramic, glass, metals and alloys, paper and board, textile and organic and inorganic coatings. All substances, including the additives and the material itself, can be released into food. Most common substances found in the OM extracts are monomers, incompletely polymerized polymers, degraded polymers and/or additives.

3. How is it analyzed?

Overall migration (OM) is determined by exposing the item to a food simulant under selected conditions of time and temperature. The types of food simulant and migration conditions are specific of each regulation. The food contact articles are filled with or immersed in the food simulant, depending on the shape of the article. After the appropriate time, food simulant is separated from the sample and evaporated (or analysed by other suitable methods) and then OM is determined gravimetrically.

Food simulants are used instead of real food. Depending upon the type of food with the concerned product is intended to be in contact with, several categories of simulants are used, including water, diluted acid, ethanol solutions of various concentrations, organic solvents and vegetable oil.

4. How can it be avoided?

Several possible sources may contribute to the migration of substances from the article:

- Non-polymerized monomers or incompletely polymerized polymers.
- Additives.
- Contaminants from the manufacturing process.

To meet the requirement of overall migration, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process and to have properly implemented the appropriate GMP regulations.

IV. A. 3. SPECIFIC MIGRATION

1. What is it?

The measurement of Specific Migration (hereinafter SM) quantifies the amount of specific substances migrated out of the food contact product under specified test conditions. Specific migration is an important indicator of the quality of the product and the substances for which this parameter is determined are specific for each material.

2. Where can it be found?

Specific substances, including residual monomers, additives and preservatives can migrate from food contact materials. The target substances for which this parameter is determined depend on the food contact material to be tested.

3. How is it analyzed?

Specific Migration (SM) is determined by exposing items to a food simulant under specified conditions of time and temperature. The type of food simulant and the migration conditions are specific of each regulation. Food contact articles are filled with or immersed in the food simulant, depending on shape of the article. After the appropriate contact period, the food simulant is separated from the sample and the specific compound is determined by using different analytical techniques, usually GC-MS (Gas Chromatography coupled to Mass Spectrometry) or LC-MS (Liquid Chromatography coupled to Mass Spectrometry).

Food simulants are used instead of real food. Depending on the type of food with which the concerned product is intended to be in contact, several categories of simulants are used, including water, diluted acid, ethanol solutions of various concentrations, organic solvents and vegetable oil.

4. How can it be avoided?

Usually, the targets of the specific migration test are monomer(s) and additives used in the manufacturing process of synthetic resins. To meet the requirements of specific migration, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process.

IV. A. 4. RESIDUAL SUBSTANCES

1. What are they?

The residual substances are specific unreacted organic substances, such as monomers and other starting substances, that remain in residual quantities in the finished product.

2. Where can they be found?

The residual substances can be found as impurities in food contact materials made of or containing synthetic resins, such as plastic, rubber, varnishes, lacquers and paints or other coatings. The target substances to be determined depend on the food contact material to be tested.

3. How are they analyzed?

The residual substances are determined by extracting a portion of the sample with an appropriate solvent. The resulting extract is analysed using a suitable analytical technique.

4. How can they be avoided?

To meet the requirements of residual substances, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process.

IV. A. 5. METALS

1. What are they?

Metals, in their elemental form or as a part of chemical compounds, are substances the use of which is regulated for food contact materials in many countries. Therefore, the presence of certain metals in these articles, especially the amount of metal leached out from them, should be controlled to ensure compliance with Inditex requirements.

2. Where can they be found?

Metal ions can be present in food contact materials as impurities or as part of pigments.

3. How are they analyzed?

Metal migration

The metal migration is determined by exposing the item to a food simulant under specified conditions of time and temperature. The type of food simulant and the migration test conditions are specific of each regulation. The food contact articles are filled with the food simulant or immersed in it, depending on the shape of the article. After the appropriate contact period, the food simulant is separated from the sample and the specific compound is determined by AAS (Atomic Absorption Spectrophotometry), ICP-OES (Inductively Coupled Plasma coupled Optical Emission Spectrophotometry) or ICP-MS (Inductively Coupled Plasma coupled Mass Spectrometry).

Metal content

The metal content it is determined by digesting the sample with an appropriate acidic oxidant. Then, suitable instruments like AAS, ICP-OES or ICP-MS are used to determine the level of metals present in the extract.

Heavy metals as lead

The parameter heavy metals as lead (as Pb) shall be determined for those food contact materials made of synthetic resins such as plastic, rubber, silicon rubber and organic coatings. This parameter is used to determine whether a sample releases an amount of heavy metals that exceeds the allowable maximum. For the purposes of this test, “heavy metals” refers to metallic substances that exhibit a dark colour when exposed to a sodium sulphide reagent. The level of heavy metals is indicated as the quantity of lead (Pb). It is determined by visual comparison of the sample solution with a control preparation from a standard lead solution (1 ppm).

4. How can they be avoided?

Although there is no clear and well known relationship between the migration of heavy metals and heavy metal content, a low heavy metal content often leads to a lower probability of metal migration.

Impurities in the raw materials, decals and patterns; additives, colorants and pigments and their impurities; and contaminants arising from the manufacturing process may be possible sources of heavy metals. Thus, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process. The use of raw materials coming from trusted suppliers and controlling the raw material sources may reduce the risk of heavy metals impurities. Ceramicware and metalware glazing processes, if present, shall be strictly planned and supervised.

Ceramicware with leaded glazes and leaded glass (*i.e.* crystal) may have higher risk of lead migration. In addition, coloured ceramic glass may have higher risk of leaching lead since the pigments used for coloration may contain lead and other heavy metals. To ensure that the material does not leach out lead, the manufacturing process must be tightly controlled.

The use of pigments and additives containing cadmium and cobalt shall be avoided. Ceramicware and glassware with blue patterns and glazes may have higher risk of cobalt content and thus, the presence of this metal ion in the food contact area shall be carefully controlled.

IV. A. 6. POTASSIUM PERMANGANATE ($KMnO_4$) CONSUMPTION

1. What is it?

$KMnO_4$ (potassium permanganate) is a chemical having strong oxidizing properties. Its consumption is an indicator of the amount of organic substances migrated from food contact materials using water as food simulant. This parameter can be used to evaluate the inertness and stability of food contact materials and products.

2. Where can it be found?

Potassium permanganate can oxidize organic substances migrated to water from unstable food contact materials made of synthetic resins, such as plastic, rubber, silicone rubber and organic coatings; and paper and board.

3. How is it analyzed?

The measurement of "$KMnO_4$ consumption" is performed by adding $KMnO_4$ to the migration extract and recording the amount of $KMnO_4$ consumed. The migration extraction is carried out in water under specific conditions of time and temperature that vary depending on the food contact material.

4. How can it be avoided?

Several possible sources may contribute to the migration of organic substances out of the product, such as non-polymerized monomers or incompletely polymerized polymers, additives, contaminants from the manufacturing process, etc.

To meet the requirements of $KMnO_4$ consumption, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process.

IV. A. 7. COLOUR MIGRATION

1. What is it?

This measurement focuses on the migration of coloured material, such as dyes or pigments, out food contact products made of plastic, rubber and silicon rubber. If colour migration is observed, it means that the coloured material inside the product may leak out.

In addition to colour migration, this requirement includes the measurement of turbidity and sediment produced by migration of solid particles from food contact material.

2. Where can it be found?

All food contact products made of coloured plastic, rubber and silicon rubber.

3. How is it analyzed?

Food contact products made of plastic

The measurement of colour migration involves observation of the colour change of a cotton swab after using the swab (soaked in colourless vegetable oil or 65 % alcohol) to rub 100 times a small area of the coloured food contact product. No colour should be detectable in the cotton. In addition, no colour, turbidity and sediment should be observed in the migration solutions after the migration tests.

Food contact products made of rubber and silicon rubber

No colour, turbidity and sediment should be observed in the migration solutions after the migration tests.

4. How can it be avoided?

A tightly controlled manufacturing process, controlling the ammount of colorants used, is required to meet the colour migration requirements.

IV. A. 8. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

1. What are they?

PAHs are a group of hydrocarbons composed of multiple aromatic rings. They can be originated as residues from incomplete combustion or pyrolysis of organic matter.

2. Where can they be found?

PAHs may be present in plastics and elastomer materials, varnishes, lacquers and paints or other coatings.

3. How are they analyzed?

The PAHs are determined by ultrasonic extraction of the sample with toluene. After the extraction step (1 h; 60ºC), GC-MS (Gas Chromatography - Mass Spectrometry) is used to determine the levels of PAHs present in the extract.

4. How can it be avoided?

Manufacturers need to pay close attention to the raw materials and the manufacturing process in order to ensure that no contamination of PAHs occurs during production. Black coloured plastics, elastomeric materials, varnishes, lacquers and/or paints or other coatings may have higher risk of PAHs content. Pigments such as Carbon Black are a source of PAHs contamination. Industrially manufactured Carbon Black is produced by pyrolysis of hydrocarbons at high temperatures under controlled process conditions. This results in the formation of unavoidable trace levels of PAHs, which firmly bound to the Carbon Black surface under normal handling and use.

IV. A. 9. PRIMARY AROMATIC AMINES

1. What are they?

Primary aromatic amines (hereinafter, PAA) are a group of substances in which one of the three hydrogen atoms in the ammonia molecule has been replaced by an aromatic group.

2. Where can they be found?

PAAs may be released from certain materials such as polyamides, polyurethanes and epoxy resins or rubber. PAAs can also appear as contaminants in pigments.

3. How are they analyzed?

PAAs are determined by exposing the item to a food simulant under specified conditions of time and temperature. The type of food simulant and migration conditions are specific of each regulation. Food contact articles are filled with or immersed in the food simulant, depending on the shape of the article. After an appropriate contact period, the food simulant is separated from the sample and the specific substances are determined by using gas chromatography coupled mass spectrometry (GC-MS).

4. How can it be avoided?

A tightly controlled manufacturing process is required to meet the requirements.

IV. A. 10. FLUORESCENT MATTER

1. What is it?

This is a parameter used to control the release of fluorescent materials, which could be used as whitening agents in food contact products made of paper and board and textile.

2. Where can they be found?

All food contact materials made of paper and textile may contain this type of substances, especially those made of recycled materials.

3. How are they analyzed?

The sample is brought in contact with a fiberglass piece, which is initially soaked in a food simulant or a synthetic saliva. After an appropriate contact period, the piece of fiberglass is separated from the sample and exposed to a UV lamp (365 nm). The amount of fluorescent matter is determined by visual comparison of fiberglass pieces with different known concentrations of optical bleaching agents.

4. How can it be avoided?

The presence of fluorescent materials may be avoided by using raw materials coming only from trusted suppliers and by paying special attention to the products which may contain recycled paper and vegetal fibres.

IV. A. 11. MICROORGANISMS

1. What are they?

A microorganism is living organism that is too small to be viewed by the unaided human eye, such as bacteria, protozoa, some fungi or algae.

2. Where can they be found?

Within the scope of food contact materials, the main concern regarding microorganisms are those items that cannot be cleaned, such as paper napkins, disposable chopsticks, etc; and food contact materials made of natural materials such as natural wood and cork.

3. How are they analyzed?

The samples, which are collected with a cotton swab or a test paper, are placed in an adequate culture media. Then the mixture is incubated at 36ºC for a certain period of time, which vary depending on the microorganism to be determined, and the growth of microorganisms is observed.

4. How can they be avoided?

The manufacturer shall implement hygienic controls in the food contact material manufacturing process and in the manufacturing facilities to avoid any contamination. Keep the manufacturing site clean and in a good hygienic condition. Operators should follow good hygienic practices to keep their hands clean and to avoid microbial contamination.

IV. A. 12. SENSORY TEST

1. What is it?

Sensory test is used in food contact materials to measure the alteration of the organoleptic characteristics of foods. It relies on the human senses to check whether the food contact material generates any smell or taste.

2. Where can it be found?

Any substance which can evaporate, or leach out of the food contact material may generate a detectable smell or taste.

3. How are they analyzed?

Food is stored in contact with the test material in a closed container and kept in dark for a specified period of time at a certain temperature. Then, six experienced testers evaluate the smell and taste deviation of two samples of treated food against a reference sample and give a score. Finally, the score average number is calculated.

4. How can it be avoided?

The use of some additives that may leach into food and generate a detectable odour and/or taste shall be avoided. Incomplete polymerization during the production stage may be a source of volatile or leachable substances in the final product.

IV. A. 13. OTHER REGULATED SUBSTANCES AND PARAMETERS

1. What are they and where they can be found?

Other regulated substances and parameters in food contact materials include preservatives and additives used as softening agents, antioxidants, colorants, etc. that are legally controlled and that may be present in the final product:

- **Glyoxal**: Glyoxal (CAS No. 107-22-2) is used in paper and board production. Its addition in sizing paper can enhance dry strength and wet tensile strength.

- **AZO dyestuff**: Dyes containing azo groups (-N=N-) in their molecular structure (azo dyes) where the azo group is associated with one or more aromatic rings to form a conjugated system. These types of substances may decompose into one or more aromatic amines. Azo dyes may be used as coloring agents in paper and board and textiles.

- **Formaldehyde**: Formaldehyde (CAS No. 50-00-0) is a colourless, strong-smelling gas, which has many industrial uses, such as preservative. This substance can be found in paper and board, textile, wood or natural cork.

- **Alkyl (C8-C18) sulfates**: Alkyl (C8-C18) sulfates are anionic surfactants. In the textile industry, it can be used as antistatic, untangling and softening agents in different processes of textile manufacturing such as scouring, lubrication, dyeing and finishing.

- **Hydroquinone and derivatives**: Hydroquinone and derivatives are aromatic organic compounds. Derivatives of hydroquinone such as di-tert-butyl hydroquinone can be used as antioxidant for textile fibres and rayon fibre finishing.

- **Mercaptans**: Also known chemically as thiols, mercaptans are an organic sulfur compounds of the form R–SH that emit unpleasant odor.

- **Sodium-2-mercaptobenzothiazole**: Sodium-2-mercaptobezothiazole is a compound with antimicrobial activity. It can be used as preservative in textile.

- **Triethanolamine**: Triethanolamine, often abbreviated as TEA, is an organic chemical compound which is both a tertiary amine and a triol. TEA is used as reaction intermediates for the preparation of durable press fabric finishes and softeners.

- **Colour migration**: This parameter focuses on the migration of coloured material, such as dyes or pigments, out of food contact products made of paper and board or textile. If colour migration is observed, it means that the coloured material inside the product leaks out.

- **Pentachlorophenol**: Pentachlorophenol (PCP) (CAS No. 87-86-5) is an organochlorinated compound used in the past as a preservative and fungicide in paper and wood materials. This use is no longer permitted.

- **Polychlorinated biphenyls**: Polychlorinated biphenyls (PCBs) belong to a broad family of synthetic organic chemicals known as chlorinated hydrocarbons. PCBs were used in the past as impregnating agents and carriers in some paper and wood preservatives such as PCP or 1,1-trichloro-2,2-bis(4-chlorophenyl)ethane (DDT). The use of PCBs is no longer permitted.

- **Antimicrobial agents**: Active chemical substances added to articles made of paper and board or textile in order to prevent the presence of undesirable microorganisms and increase the shelf-life of the products.

- **Sulphur dioxide**: Sulphur dioxide (CAS No. 7446-09-5) is a colourless gas with a characteristic pungent odour, which is sometimes used as a preservative agent.

- **Trichlorophenol**: 2, 4, 6-Trichlorophenol (TCP) (CAS No. 88-06-2) is a clear to yellowish crystalline solid that has been used as a fungicide, herbicide, insecticide, antiseptic, defoliant and glue preservative.

- **Thiabendazole, ortho-phenylphenol, biphenyl and imazalil**: Thiabendazole (CAS No. 148-79-8), ortho-phenylphenol (CAS No. 90-43-7), biphenyl (CAS No. 92-52-4), and imazalil (CAS No. 35554-44-0) are fungicides. They could be used alone or combined as mixtures as wood preservatives.

2. Where can they be found?

They can be found in food contact products made of paper and board, vegetal fibres, natural wood, natural cork and other natural materials, as well as in textiles and coatings.

3. How are they analyzed?

Residual content of substances

The residual content of substances is determined by extracting a protion of the sample with an appropriate solvent and analyzing the resulting extract using a suitable analytical technique.

Specific migration of substances

The specific migration of substances is determined by exposing the sample to a food simulant under specified conditions of time and temperature and analyzing the migration extract using a suitable analytical technique.

Antimicrobial agents

A culture media is mixed with an inoculum made of the bacteria Bacillus subtilis and the fungus Aspergillus niger and placed in a petri dish. Then, the samples are placed in the culture media and incubated during a certain period of time. The existence of an inhibition zone is an indicator of the presence of antimicrobial agents.

4. How can they be avoided?

Several possible sources may contribute to the migration of the aforementioned substances out of the product such as additives; contaminants from the raw materials used; and contaminants from the manufacturing process. To meet the above requirements, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process.

IV. B. PRODUCT SAFETY REQUIREMENTS

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IV. B. 1. PRODUCT SAFETY REQUIREMENTS APPLICABLE TO COOKWARE AND OVENWARE

1. What are they?

The safety requirements are intended to define the basic specifications that all types of cookware and ovenware articles shall meet in order to guarantee a reasonable degree of safety during their normal use, thereby improving personal safety and reducing injuries.

2. How are they analyzed?

Combustion resistance of the handle

Expose the lower end of the handle (inflammable part) to a flame at a distance of 30 mm, for 30 seconds. Check visually if the handle melts, drips molten and /or burns.

Fatigue and heat resistance of the handle

To measure these parameters, preconditioning of the samples shall be performed in first place.[6] Then, the samples shall be attached securely to the specific apparatus, which shall be selected according to the type and number of handles, and loaded with 1.5 times of the mass of water required to fill the kitchenware at its full capacity. Finally, after running the required number of cycles, the sample shall be visually inspected for any permanent damage.

Handle and Knob design

To determine if the design of the handle(s) and/or the knob is adequate, the tester shall hold the handle(s) and/or knob using an oven glove and shall check if the handle(s) or knob are able to hold the main body securely, stably and appropriately. Ovenware shall be tested after exposing the items to a temperature of 20ºC above the manufacturer recommendation or at 250ºC.

Handle position

This parameter is determined by calculating the center of gravity of the article full of water and checking if the handles are located above it. Additionally, there must be more than 30 mm between the handle and the horizontal plane of the article base.

Handle strength

Cold test, ITX-EN 12983-1:2001[7]: Attach the kitchenware firmly to a rigid base so that the contact face of the load bar is 10 mm from the end of the handle. Then, apply progressively and without impact a load of 100 N on the handle until all the load is supported or the fixing system fails. Nevertheless, if the weight of the article to be tested plus 3 times the weight of water capacity of the article is more than 10 kg, apply a load at the center of the handle for 1 min according to the specifications enclosed in the following table:

Type of product	Load direction	Load force	Load time
Kitchenware with double handle	Upward	$W=1/2W_1+3/2W_2$	1 min
Kitchenware with single handle (stick handle)	Downward	$W=W_1+3W_2$	1 min

Continued on next page

6 Ovenware preconditioning stage shall be performed according to the heat resistance procedure described above. Cookware shall be preconditioned for 1h at (150 ± 5) ºC.

7 The ITX-EN 12983-1:2001 protocol is based in the EN 12983-1:2001 and the GB/T 13484 (6.2.1), GB/T 29601-2013 (6.2.8), GB/T 32388-2015 (6.2.6) and GB/T 32432-2015 (6.7) test methods.

Type of product	Load direction	Load force	Load time
Kettle with ring handle	Upward	$W=W_1+2W_2$	1 min
Kettle side handle	Downward	$W=W_1+2W_2$	1 min
W= load force; W_1= 9.8 x weight of article; and W_2= 9.8 x maximum water capacity of article			

Hot test: Heat the kitchenware with handle assembled and loaded with 4 kg in the center of the kitchenware[8] in an oven until the handle reaches 177ºC (or until it reaches the manufacturer's recommended use temperature) for 40 min. Lift kitchenware from oven by grasping handle in normal manner. Fracturing or deformation of 10º or greater of any part during a 1 min period shall constitute failure.

Heat resistance (for all types of cookware and ovenware)

Place the item to be tested in the oven preheated at 20ºC above the manufacturer's maximum recommended temperature (or 250ºC where no recommendation is given). Keep the article in the oven for 1 hour at this specific temperature. Remove the test item from the oven and place it on a dry surface and allow to cool to RT. Inspect visually the test item for any damage.

Heat resistance (for cookware and ovenware made of metal and alloys)

Place the article, empty, on an appropriately sized electric burner. The electric burner is set to high and the article is allowed to remain for 10 min.[9]

Inclination angle

Place the empty cookware horizontally on the test bracket;[10] remove the external force used for keeping it stable, observe the sliding and inclination of the cookware body; after its stabilization, measure the height difference between the highest and the lowest point of the cookware opening and then calculate the inclination angle according a specific equation.

Lid design

The tester shall check if the lid can be removed from the body using a force equal to the weight of the lid, +2 N, in any position at ambient temperature. The test shall be carried out both before and after exposing the article, filled to its usable capacity with water, to boiling temperature (for cookware) or to a temperature 20ºC above the manufacturer's maximum recommended temperature[11] for 30 min and allowing cooling in ambient combinations for ten minutes (for bakeware). The tester shall also check if the lid remains in place throughout the heating and cooling stages and if the lid does not fall while checking the 'stability' parameter.

Mechanical hazards

The presence of defects such as burrs, splinters or sharp edges can be inspected visually and tacitly or using a CATRA sharp edge tester, being the last the recommended procedure. The CATRA sharp edge tester is a safety evaluation tester suitable for determining whether any object, which has a sharp edge, corner, or protrusion, is likely to cause a skin cut injury to the user in normal use. By utilization of a 'skin like' tape the device can be used to indicate whether edges are sharp or not under a constant load application of 6 N.

8 Load shall be 4 kg or twice the weight of the water capacity of the kitchenware, plus the weight of any lid, whichever is greater.
9 The article is allowed to remain for 10 minutes except in the following cases:
- Articles of a 1–1/2 quart capacity or smaller: 5 min.
- Articles with copper bottoms that are 9" in diameter or smaller: 5 min.

10 The test bracket is a device with specific dimensions that simulates a stove.
11 Or 250ºC where no maximum temperature is recommended.

Number of handles

The number of handles shall be determined according to the volume of the article and/or the total weight of the article when filled with water to its capacity.

Resistance to leakage

Fill the utensil to be tested with water and oil and submit it to 2 h at 150ºC for cookware and 1 h at 20ºC above the manufacturer's recommended maximum temperature (or 250ºC where no maximum temperature is given) for ovenware. Inspect the utensil for leaking during and after the heating process.

Spout strength

Put a weight equivalent to three times the full capacity of water at the tip of the spout vertically downward for 1 hour. Then visually inspect for breakage and water leakage.

Stability

EN 13834 / EN 12983: Place the empty article, without lid, on a 5º incline to determine if it remains stable in the least favorable position.

JIS 2010: Fill the article with water and place it, provided with the lid (in case it is applicable), on a 15º incline to determine if it remains stable in the least favorable position.

Tear resistance

To measure the tear resistance ovenware made of flexible materials, such as silicone, shall be visually inspected after their exposure at 20ºC above the manufacturer's maximum recommended temperature (or 250ºC where no recommendation is given) for 1 hour in an oven.

Thermal risk

Place the utensil to be tested provided with its lid (if applicable) and with the water or oil content indicated in the table shown below on a stove. Wait until the content of the utensil reaches the adequate test temperature and keep it for 30 min on the stove. Then, measure the handle(s) and knob temperature.

Utensil	Content	Volume	Test temperature
Casserole	Water	50 % of capacity	Boiling temperature
Frying pan	Oil	10 mm from the bottom	200ºC
Deep frying pan	Oil	50 % of capacity	200ºC

Thermal risk (Handle and Knob design)

Follow the test protocol described in the previous point. Then, use a spherical probe of 14 mm diameter to measure the temperature.

Thread engagement

Check if the fixing system threaded screws or studs are screwed a minimum of three full turns.

Torsion resistance of handle

To determine the torsion resistance of the handle, preconditioning of the samples according to EN 12983-1:2001 Annex B is required in first place.[12] Then, a test bar[13] shall be firmly fixed perpendicularly to the handle at the mid-point of the length of the handle[14] and the complete assembly attached to the test equipment. After adjusting the complete assembly in order to level the bar, a test mass of 1 kg shall be applied to the left side of the test bar in order to subject the center of the handle to a torque force for 30 s. Then, the test mass shall be transferred to the right side to repeat the previous process. Finally, the sample shall be inspected for any damage.

Thermal shock resistance/ Thermal shock resistance of the bottom/ Resistance from freezer to oven

To measure this parameters, cookware and ovenware shall be visually inspected after being exposed to alternating low and high temperatures that may accelerate failures caused by temperature cycles or thermal shocks during normal use.

12 Preconditioning of cookware is achieved by submitting the sample to the heat resistance test according to the EN 12983-1:2001 – Annex B test at a temperature of (150 ± 5) ºC for 1 h.
13 Test bar shall have a length of 1m and a weight of 1 kg.
14 The length of the handle shall not take into account any devices that are not an integral part of the handle's own structure.

IV. B. 2. PRODUCT SAFETY REQUIREMENTS FOR KNIVES

1. What are they?

The safety requirements considered within this part are intended to define the basic specifications that all types of knives shall meet in order to guarantee a reasonable degree of safety during their normal use, thereby improving personal safety and reducing injuries.

2. How are they analyzed?

Mechanical hazards

The presence of defects such as burrs, splinters or sharp edges can be inspected visually and tacitly or using a CATRA sharp edge tester, being the last the recommended procedure. The CATRA sharp edge tester is a safety evaluation tester suitable for determining whether any object, which has a sharp edge, corner, or protrusion, is likely to cause a skin cut injury to the user in normal use. By utilization of a 'skin like' tape the device can be used to indicate whether edges are sharp or not under a constant load application of 6 N.

Fixing system strength of the handle

The fixing systems of the knives shall withstand the immersion in water at 75ºC for 30 min immediately followed by the application of a specific torque or traction force (depending on the type of article) for 10 s.

Resistance of the plastic handle against cracks due to stress

The plastic handles of the knives should not be broken once assembled when:

- the cutting tools are immersed for 24 hours at a temperature of 22°C in a solution of toluene: n-propanol in a ratio of 1:3; and
- they are subjected to the following test for 30 cycles: after immersion for 15 minutes in water at 70°C, the knives are immediately transferred for 3 hours to a refrigerator at -18°C, and then straightaway boiled in water to start again with the next cycle. Once completed the last cycle, the knives are allowed to stand at 15ºC and finally subjected to an inspection with a microscope or a calibrated lens of no less than four magnifications, looking for any fissure.

IV. B. 3. PRODUCT SAFETY REQUIREMENTS FOR MICROWAVE-SAFE FOOD CONTACT ARTICLES

1. What are they?

The specifications considered within this part are intended to define the minimum requirements that articles intended to be used for microwave cooking, warming up and/or defrosting shall meet in order to resist microwave heating and thus, to provide a reasonable degree of safety during microwave heating.

2. How are they analyzed?

Suitability for microwave heating

The article to be tested is subjected to microwaves in the presence of water external to the test specimen for both a short and a long period of time. To do so, the test specimen shall be placed at the center of the oven on the turntable and microwaved for the time determined to give an energy value of 72000 J for the short period and 468000 J for the long period of test. If electrical arcing begins immediately switch off the oven. If electrical arcing does not occur, complete the short and long time cycles. For articles with handles, the temperature of the handle is measured after the short period of heating. The maximum surface temperature can be determined after the short and long periods of heating.

Resistance from freezer to microwave oven

Resistance from freezer to microwave heating shall be evaluated by subjecting the test specimen to the following cycle: after cooling down the article in a freezer at -8ºC for 16 h, subject it to microwaves and then place it again in the freezer at -8ºC immediately. Finally, the test specimen is visually inspected for any damages.

IV. B. 4. PRODUCT SAFETY REQUIREMENTS FOR CHILDREN'S TABLEWARE

1. What are they?

The safety requirements are intended to define the basic specifications that all children's tableware shall meet in order to guarantee a reasonable degree of safety during their normal use, thereby improving personal safety and reducing injuries.

2. How are they analyzed?

Visual and tactile examination

The tester shall check visual and tactile the presence of defects in any components of children's tableware, such as points and edges which are likely to cause injury.

Sharp points

The presence of sharp points is determined by using a point tester is applied to an accessible sharp point and it is determined whether or not the point being tested penetrates a specified distance into the sharp point tester.

Sharp edges

The presence of sharp edges is determined by using a self-adhesive tape that is attached to a mandrel which is then rotated for a single 360° revolution along the accessible edge being tested. The tape is then examined for the length of cut.

Small parts

The small parts of an article are determined by place component or part without compressing it and in any orientation in a cylinder having dimensions as indicated in Figure 18 (EN 14372). Determine whether the toy or component fits entirely within the cylinder.

Holes (Finger traps)

The accessible holes are determined by introducing a rod of specific dimensions that simulates a children's finger, in any hole of the article. Accessible holes may present a risk of entrapment of fingers and restricting blood circulation.

Printed decorations resistance

This requirement is determined by assess the resistance of paint coatings to separation from substrates when a right-angle lattice pattern is cut into the coating, penetrating through to the substrate.

Tensile strength

This requirement is determined by applied a specific tensile force to one component of the sample whilst another component is firmly held. Test shall be carried out along the major axis and at the right angles to the major axis.

Torque test

The torque resistance of children's tableware is determined by gradually apply a torque to the component over a period of approximately 5 s in a clockwise direction until either

a) a rotation of 180° from the original position has been attained, or

b) a torque of 0,34 Nm (for cutlery and feeding utensils), 2 or 3 inch-pounds (for drinking utensils), is reached.

Maintain the maximum rotation or required torque for 10 s. Permit the test component to return to a relaxed condition. Repeat this procedure in a counterclockwise direction.

Tear resistance

The tear resistance of an children's tableware is determined by place the component to be tested on a cutting board of at least 10 mm thickness and 70 ± 5 Shore D hardness. Place the tip of the indentor, that have a specific shape and dimensions, in the approximate center of the largest surface of the component to be tested. At a crosshead speed of 10 ± 5 mm/min apply a force of 200 ± 10 N for 1 ± 0.5 s. If the indentor punctures the component shall be necessary, carry out the tensile strength test.

Strength/rigidity

The strength/rigidity of any cutlery handles is determined by place it in a tensile testing machine with an attachment to facilitate three-point bend. The machine applies a compression load to 100 5 N at a crosshead speed of 10 ± 5 mm/min and maintain for 10 ± 1 s as shown in Figure 6 of EN 14372. The load shall be applied at the midpoint of item's length. The test shall be repeated with load applied at 30 ± 1 mm either end of the product. In each test the restraining points shall be positioned 25 ± 1 mm from the load point.

Drop test

This requirement is determined by dropped the article from a specific height on to a specific surface.

If the article is a cutlery or feeding utensil and is intended to use only by children

– ≤ 18 months of age: The article shall be dropped 10 times from a height of 1.37 m.

– > 18 but < 36 months of age: The article shall be dropped 5 times from a height of 0.92 m.

If the article is a drinking utensil and is intended to use only by children

– ≤ 18 months of age: The article shall be dropped from a height of 1.20 m and 1.37 m.

– > 18 but < 36 months of age: The article shall be dropped from a height of 1.20 m.

Resistance to boiling water

To measure this parameter, re-usable children's drinking utensils shall be visually inspected after being exposed to boiling water for 10 min without touching the walls of the container and them conditioned according specific conditions.

Thermal shock

To measure this parameter, re-usable children's drinking utensils shall be visually inspected after being exposed to alternating high and low temperatures that may accelerate failures caused by thermal cycles or thermal shocks during normal use.

Security/retention test

This requirement is determined as following: Where a locking ring is provided, tighten it to a torque of 1.75 ± 0.25 Nm. Alternatively, fit all the individual parts of the assembly together. Secure the container at an angle of 45º to the major axis. Using a suitable clamping device, hold either 10 ± 2 mm of the tip of the nipple of the teat or 10 ± 2 mm of the sides of the accessory with have been compressed together in line with the major axis. Apply a pre-load of 5 ± 2 N at 45º to the major axis of the feeding teat or drinking accessory to ensure alignment, prior to increasing the force to 60 ± 5 N in the same direction, at a crosshead speed of 200 ± 5 mm/min. Maintain for 10 ± 5 s.

Flexibility test

This requirement is determined by applying a force to the end of the protrusion or straw using a steel plate and the point at which the protrusion or straw bends is measured.

Sealing test

This requirement is determined by fill the drinking utensil with water at room temperature (2/3 of the nominal capacity). Then, assemble the article according to the manufacturer instructions. Invert the sample and after 3 min inspect visually the test item for any leak.

V. PRODUCT HEALTH REQUIREMENTS: ACCEPTABLE LIMITS

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Inditex Precautions and Limits for Users Safety for Food Contact Materials

V. A. PRODUCT HEALTH REQUIREMENTS: ACCEPTABLE LIMITS FOR TABLEWARE PRODUCTS

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V. A. 1. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS MADE OF PLASTIC

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to plastic materials included in Annexes I and II of this Standard. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of tableware products made of plastic. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. A. 1. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table according to the specific plastic material:

Tableware products intended to be used in contact with all types of foodstuffs[15]				
Material	**Limit**	**Units**	**Test conditions[16]**	**Method**
ABS, AS and PS	30	mg/kg	(EN: 10 % EtOH; SK: water)	ENSK–OM[17]
			4 % HOAc	GBSK–OM 1[17]
		mg/L	20 % EtOH	SK[18]
	240	mg/L	n-heptane	
	50	mg/kg	Vegetable oil	EN 1186
ACRYLIC RESINS, EVA (*i.e.* PEVA)[19], MELAMINE, PA, PE, PET / PETG, PLA, POM and PP	30	mg/kg	(EN: 10 % EtOH; SK: water)	ENSK–OM[17]
			4 % HOAc	GBSK–OM 1[17]
		mg/L	n-heptane; 20 % EtOH	SK[18]
	50	mg/kg	Vegetable oil	EN 1186

V. A. 1. 3. SPECIFIC MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the specific migration of the substances specified in the following table according to the specific plastic material:

Tableware products intended to be used in contact with all types of foodstuffs[20]					
Material	**Parameter**	**Limit**	**Units[21]**	**Test conditions[22]**	**Method**
ABS	Acrylonitrile monomer	nd[23]	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.17 or EN 13130-3[24,25]
		0.02 (or 0.03 mg/m^3 [26])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[27]

Continued on next page

15 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

16 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

17 See protocol in section V. A. 11

18 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II."

19 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate higher than 40 %). See Chapter V. A. 2 for 'EVA rubber' requirements.

20 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

21 Units mg/kg: it is referred to kg of food simulant.

22 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

23 LOD (limit of detection): 0.01 mg/kg.

24 For 4 % HOAc use the Chinese method; for 10 % EtOH, vegetable oil and/or other food simulants applicable to a single type of food or specific groups of foods use the European method.

25 In case of tableware for cold and/or ambient use for short term contact the following conditions shall be used: 10 % EtOH as simulant; 70ºC of temperature; 30 min; 1st migration.

26 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.

27 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16." or "CU TR 007/2011 on safety products intended for children and teenagers".

Tableware products intended to be used in contact with all types of foodstuffs[20]					
Material	**Parameter**	**Limit**	**Units[21]**	**Test conditions[22]**	**Method**
ABS	1,3-Butadiene	nd[23]	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.12 or EN 13130-15[24]
	VOM	15	mg/dm^2	-	LFGB
	Styrene	0.010 (or 0.002 mg/m^3 [26])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[27]
	Xylols (isomer mixture)	0.010 (or 0.002 mg mg/m^3 [26])			
	Alpha-Methylstyrene	0.100 (or 0.040 mg/ m^3 [26])			
	Benzene	0.010 (or 0.100 mg/ m^3 [26])			
	Toluene	0.500 (or 0.600 mg/ m^3 [26])			
	Ethylbenzene	0.010 (or 0.020 mg/ m^3 [26])			
	Benzaldehyde	0.003 (or 0.040 mg/ m^3 [26])			
ACRYLIC RESINS	Methyl methacrylates[28]	6[29]	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.29 or EN 13130[24,30]
	Acrylates[31]	6[32]	mg/kg		GB 31604.29 or EN 13130[24]
	VOM	0.5	%	–	LFGB
	Peroxides	nd	–	–	
	Hexane	0.100 (or 0.085 mg/ m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[27]
	Heptane	0.100 (or 0.065 mg/ m^3 [26])			
	Acrylonitile	0.020 (or 0.030 mg/ m^3 [26])			
	Methylacrylate	0.020 (or 0.010 mg/ m^3 [26])			
	Methylmethacrylate	0.250 (or 0.010 mg/ m^3 [26])			
	Butyl acrylate	0.010 (or 0.0075 mg/ m^3 [26])			

Continued on next page

28 Only in compliance with the polymers and copolymers containing methacrylic acid derivatives. [2-methylpropenoic acid; methyl methyacrylate; ethyl methacrylate; isobutyl methacrylate; butyl methacrylate; phenol, polymer with (R)-1-methyl-4-(1-methylethenyl) cyclohexene; 2-methyl-2-propenoicacianhydride; 2-hydroxyethyl-2-methyl-2-acrylate; phenyl methacrylate; 2-propenoic acid, 2-methyl-, propyl ester; benzyl methacrylate; sec-butyl methacrylate; iso-propyl methacrylate].

29 Expressed as methacrylic acid.

30 In case of tableware for cold and/or ambient use for short term contact, the following test conditions shall be used: 20 % as simulant; 70ºC of temperature; 30 min; 1st migration.

31 Only in compliance with the polymers and copolymers containing acrylic acid derivatives. [Polyacrylate; propenoic acid; methyl acrylate; 2-propenoic acid-2-methylpropyl ester; ethyl acrylate; butyl acrylate; iso-propyl acrylate; 2-hydroxyethyl acrylate; Propyl acrylate; 2-Propenoic acid, 1,1-dimethylethyl ester; Propenoic acid benzyl ester; 2-propenoic acid, octyl ester; Sec-butyl acrylate; 2-propenoic acid, polymer with 2-ethylhexyl 2-propenoate].

32 Expressed as acrylic acid.

Tableware products intended to be used in contact with all types of foodstuffs[20]					
Material	**Parameter**	**Limit**	**Units[21]**	**Test conditions[22]**	**Method**
AS	Acrylonitrile monomer	nd[23]	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.17 or EN 13130-3[24,25]
		0.02 (or 0.03 mg/ m^3 [26])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[27]
	VOM	15	mg/dm^2	-	LFGB
	Styrene	0.010 (or 0.002 mg/ m^3 [26])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[27]
	Formaldehyde	0.100 (or 0.003 mg/ m^3 [26])			
	Benzaldehyde	0.003 (or 0.040 mg/ m^3 [26])			
EVA (*i.e.* PEVA)[33]	Vinyl acetate	12	mg/kg	4 % HOAc; 10 % EtOH	GB 31604.20[34]
		0.02 (or 0.150 mg/ m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH	EAEU[27]
	Formaldehyde	0.100 (or 0.003 mg/ m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU[27]
	Hexane	0.100 (or 0.085 mg/ m^3 [26])		2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	
	Heptane	0.100 (or 0.065 mg/ m^3 [26])			
	Acetaldehyde	0.200 (or 0.010/ m^3 [26])			
MELAMINE	Formaldehyde	4	mg/L	4 % HOAc	GBSK-formaldehyde
		0.100 (or 0.003 mg/ m^3 [26])		2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU[27]
	Phenol	5	mg/L	4 % HOAc	SK[35]
	Melamine monomer	2.5 / 1[36]	mg/kg		GBTW-melamine[37]
PA	Caprolactam	15	mg/kg	4 % HOAc	GB 31604.19 or EN 13130-16[24, 30]
		0.500 (or 0.060 mg/ m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU[27]
	Hexamethylendiamine	2.4	mg/kg	4 % HOAc	GB 31604.43[34]
		0.010 (or 0.001 mg/ m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU[27]
	PAA	nd[23]	mg/kg	4 % HOAc	EN 13130[30]
	Laurolactam	5	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.1 or EN 13130[24, 30]
	Ethylenediamine	12	mg/kg		GB 31604.43 or EN 13130-21[24, 34]
	Peroxides	nd	–	–	LFGB
	Methanol	0.200 (or 0.500 mg mg/ m^3 [26])	mg/L	2 % HOAc + NaCl 2 %; 3 % lactic acid;	EAEU[27]
	Benzene	0.010 (or 0.100 mg m^3 [26])			
	Phenol	0.050 (or 0.003 mg/ m^3 [26])			

Continued on next page

33 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.
34 In case of tableware for cold and/or ambient use for short term contact, the following test conditions shall be used: 70ºC of temperature; 30 min; 1st migration.
35 Use the appropriate Korean methods according to the food contact material used. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".
36 1 mg/kg for materials and articles intended to be brought into contact with food intended for infants.
37 See protocol in section V. A. 11.

Tableware products intended to be used in contact with all types of foodstuffs[20]					
Material	**Parameter**	**Limit**	**Units[21]**	**Test conditions[22]**	**Method**
PET / PETG	Terephthalic acid	7.5	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.21 or EN 13130-2[24, 34]
	Isophthalic acid	5.0	mg/kg		GB 31604.1 or EN 13130[24, 34]
	Ethylene glycol	30	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.44
		1.000 (or 1.000 mg/m^3 [26])	mg/L	2 % HOAc + NaCl 2 %; 3 % lactic acid	EAEU[27]
	Acetaldehyde	6	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	See note[38]
		0.200 (or 0.010 mg/m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[27]
	Dimethyl terephthalate	1.500 (or 0.010 mg/m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[27]
	Formaldehyde	0.100 (or 0.003 mg/m^3 [26])			
	Methyl alcohol	0.200 (or 0.500 mg/m^3 [26])			
	Butyl alcohol	0.500 (or 0.100 mg/m^3 [26])			
	Isobutyl alcohol	0.500 (or 0.100 mg/m^3 [26])			
	Acetone	0.100 (or 0.350 mg/m^3 [26])			
PE / PP	Peroxides[39]	nd	–	–	LFGB
	Formaldehyde	0.100 (or 0.003 mg/m^3 [26])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[27]
	Acetaldehyde	0.200 (or 0.010 mg/ m^3 [26])			
	Ethyl acetate	0.100 (or 0.100 mg/ m^3 [26])			
	Hexane	0.100 (or 0.085 mg/ m^3 [26])			
	Heptane	0.100 (or 0.065 mg/ m^3 [26])			
	Acetone	0.100 (or 0.350 mg/ m^3 [26])			
	Methyl alcohol	0.200 (or 0.500 mg/ m^3 [26])			
	Propyl alcohol	0.100 (or 0.300 mg/ m^3 [26])			
	Isopropyl alcohol	0.100 (or 0.600 mg/ m^3 [26])			
	Butyl alcohol	0.500 (or 0.100 mg/ m^3 [26])			
	Isobutyl alcohol	0.500 (or 0.100 mg/ m^3 [26])			
PLA	Total lactic acid	30	µg/mL	Water	JP 370
POM	Formaldehyde	4	mg/L	4 % HOAc	GBSK-Formaldehyde[37]

Continued on next page

38 For 10 % EtOH, vegetable oil and/or other food simulants applicable to a single type of food or specific groups of foods use the European test method EN 13130. For acidic food simulant follow the protocol GBEN–acetaldehyde described in section V. A. 11.
In case of tableware for cold and/or ambient use for short term contact, the following test conditions shall be used: 70ºC of temperature; 30 min; 1st migration.

39 This requirement only applies to PE.

Tableware products intended to be used in contact with all types of foodstuffs[20]					
Material	**Parameter**	**Limit**	**Units[21]**	**Test conditions[22]**	**Method**
PS	VOM	15	mg/dm^2	-	LFGB
	Peroxides	nd	–	–	LFGB
	Styrene	0.010 (or 0.010 mg/ m^3 [26])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[27]
	Methyl alcohol	0.200 (or 0.500 mg/ m^3 [26])			
	Butyl alcohol	0.500 (or 0.100 mg/ m^3 [26])			
	Benzene	0.010 (or 0.100 mg/ m^3 [26])			
	Toluene	0.500 (or 0.600 mg/ m^3 [26])			
	Ethylbenzene	0.010 (or 0.020 mg/ m^3 [26])			

V. A. 1. 4. RESIDUAL SUBSTANCES

To ensure compliance with Inditex requirements, the Supplier shall review the residual amount of the substances specified in the following table according to the specific plastic material:

Material	Parameter	Limit	Units	Method
ABS	Acrylonitrile monomer	11	mg/kg	FDA 21CFR §177.1020
	Volatile substances[40]	5000	mg/kg	SK[41]
	1,3-Butadiene	1	mg/kg	SK[41] or GB 31604.12
	Styrene monomer	0.5	%	GB 31604.16
AS	Acrylonitrile monomer	50[42]	mg/kg	FDA 21CFR §177.1040
	Volatile substances[40]	5000	mg/kg	SK[41]
	Styrene monomer	0.5	%	GB 31604.16
PS[43]	Volatile substances[40]	5000	mg/kg	JP 370
	Styrene monomer	0.5	%	GB 31604.16

40 Tested volatile substances are styrene, toluene, ethyl benzene, isopropyl benzene and propyl benzene.

41 Use the appropriate Korean methods according to the food contact material used. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.

42 This limit applies to articles produced by 45-65 parts by weight of acrylonitrile and 35-55 parts by weight of styrene. Articles made of this specific concentration of monomers, shall not be used at temperatures that exceeds 93ºC.
For articles produced by 66-72 parts by weight of acrylonitrile and 28-34 parts by weight of styrene and intended to use in contact with:
– nonalcoholic beverages at a usage temperature up to 65ºC, the applicable limit shall be 80 ppm.
– beverages containing up to 8 % alcohol and nonalcoholic beverages, at a usage temperature up to 65ºC, the applicable limit shall be 0.10 ppm.

43 For PS foam contact Inditex Sustainability Department.

V. A. 1. 5. METALS

To ensure compliance with Inditex requirements, the Supplier shall review the metal migration and metal content requirements specified in the following tables according to the specific plastic material:

Metal migration				
Material	**Parameter**	**Limit**	**Units**	**Method**
ABS, AS, ACRYLIC, EVA (*i.e.* PEVA)[44], MELAMINE, PA, PE, PET, PLA, POM, PP and PS	Al	1.00	mg/kg	GBEN-metals[45] (ICP-MS or ICP-OES analysis)
	B	0.5	mg/kg	
	Ba	1.00	mg/kg	
	Cd	nd (0.002)	mg/kg	
	Co	0.05	mg/kg	
	Cr	0.01	mg/kg	
	Cu	5.00	mg/kg	
	Eu	0.05	mg/kg	
	Gd	0.05	mg/kg	
	Hg	nd (0.005)	mg/kg	
	Ge[46]	0.1[47]	mg/kg	
	Fe	48	mg/kg	
	Mn	0.60	mg/kg	
	Ni	0.02	mg/kg	
	La	0.05	mg/kg	
	Li	0.60	mg/kg	
	Pb	nd (0.01)	mg/kg	
	Sb	0.04[48]	mg/kg	
	Sn	0.01	mg/kg	
	Tb	0.05	mg/kg	
	Zn	5.00	mg/kg	
	Others[49]	0.01	mg/kg	

Metal Content									
Material	**Limit (mg/kg)**								**Method**
	Cd	**Cr**	**Hf**	**Pb**	**V**	**Zn**	**Zr**	**Sum of Pb, Cd, Cr (VI) and Hg**	
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[50], MELAMINE, PA, PLA, POM and PS	nd			nd				100	Acid digestion / ICP
PE and PP	nd	10	100	nd	20		100	100	
PET[51]	nd			nd		80		100	
nd: < 2 mg/kg									

44 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See Chapter V. A. 2 for 'EVA rubber' requirements.
45 See protocol in section V. A. 11.
46 This parameter only apply to PET.
47 In case of tableware articles for cold and/or ambient use for short term contact if migration of result exceeds 0.05 mg/kg, contact with Inditex Sustainability Department.
48 In case of tableware made of PET for cold and/or ambient use for short term contact if migration result exceeds 0.02 mg/kg, contact with Inditex Sustainability Department.
49 As, Ag, Mo, Bi.
50 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.
51 For PET articles, besides complying with the metal content limits shown previously, the metal content shall not exceed the following limits: antimony (Sb): 350 mg/kg; gallium (Ga): 20 mg/kg; germanium (Ge): 100 mg/kg; cobalt (Co): 125 mg/kg; lithium (Li): 130 mg/kg; manganese (Mn): 140 mg/kg; titanium (Ti): 120 mg/kg; phosphorous (P): 125 mg/kg.

V. A. 1. 6. POTASSIUM PERMANGANATE - $KMnO_4$ - CONSUMPTION

To ensure compliance with Inditex requirements, the Supplier shall review the potassium permanganate consumption as specified in the following table:

Material	Limit	Units	Test conditions	Method
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[50], MELAMINE, PE, PET / PETG, PA, PLA, POM, PP and PS	10	mg/kg	Water, 60ºC, 2 h	GB 31604.2

V. A. 1. 7. COLOUR MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the colour migration as specified in the following table:

Material	Parameter	Limit	Test Method
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[50], MELAMINE, PE, PET / PETG, PA, PLA, POM, PP and PS	Color	No detection	GB 31604.7
	Turbidity and sediment		Instr. No. 880-71

V. A. 1. 8. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

To ensure compliance with Inditex requirements, the Supplier shall review all the parameters specified in the following table:

Material	Parameter	CAS No	Limit[52] (mg/kg)	Secondary limit (mg/kg)
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[53], MELAMINE, PE, PET / PETG, PA, PLA, POM, PP and PS	Benzo(a)pyrene	50-32-8	< 0.2	< 0.2
	Benzo(e)pyrene	192-97-2	< 0.2	< 0.2
	Benzo(a)anthracene	56-55-3	< 0.2	< 0.2
	Benzo(b)fluoranthene	205-99-2	< 0.2	< 0.2
	Benzo(j)fluoranthene	205-82-3	< 0.2	< 0.2
	Benzo(k)fluoranthene	207-08-9	< 0.2	< 0.2
	Chrysene	218-01-9	< 0.2	< 0.2
	Dibenzo(a,h)anthracene	53-70-3	< 0.2	< 0.2
	Benzo(ghi)perylene	191-24-2	< 0.2	< 0.2
	Indeno (1,2,3-cd)pyrene	193-39-5	< 0.2	< 0.2
	Phenanthrene	85-01-8	< 1 Sum	< 5 Sum
	Pyrene	129-00-0		
	Anthracene	120-12-7		
	Fluoranthene	206-44-0		
	Naphthalene	91-20-3	< 1	< 2
	Sum of 15 PAH	–	< 1	< 5

V. A. 1. 9. PRIMARY AROMATIC AMINES

To ensure compliance with Inditex requirements, the Supplier shall review the primary aromatic amines specific migration as specified in the following table:

Material	Limit	Test conditions[54]	Test Method
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[55], MELAMINE, PE, PET / PETG, PA, PLA, POM, PP and PS	nd[56]	3 % HOAc	EN13130-1:2004 and Kunststoffe im lebensmittelverkehr Book Teil B II XXI

52 If the PAHs limits are surpassed but the secondary limits are still met, the confirmation of suitability of the tableware product can be verified by an additional specific migration test of the PAH components according to the EN 13130 test method followed by GC-MS analysis. To comply with Inditex requirements, PAHs shall not be detected in the 1st migration extract (LOD (limit of detection): 0.01 mg/kg (sum of PAHs). If applicable, the PAHs specific migration shall be determined using the following test conditions:
Food simulants: Tableware products intended to come into contact with all types of food stuffs shall be analized in 10 % EtOH, 3 % HOAc and vegetal oil. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.
Contact time and temperature: See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

53 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.

54 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

55 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.

56 - PAAs listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006, and for which no migration limit is specified in Table 1 of Annex I of Regulation 10/2011: LOD (limit of detection): 0.002 mg/kg food simulant (each individual PAA).
- For PAAs other than above, which no specific migration limit is specified in Annex I of Regulation 10/2011: LOD (limit of detection): 0.01 mg/kg food simulant (sum of PAAs).

V. A. 1. 10. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[55], MELAMINE, PE, PET / PETG, PA, PLA, POM, PP and PS	≤ 2.5[57]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

V. A. 1. 11. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous section V. A. 1. 3, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Children's tableware products intended to be used in contact with all types of foodstuffs[58]					
Material	**Parameter**	**Limit**	**Units**	**Test conditions[59]**	**Method**
ABS	Acrylonitrile	nd	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[60]
	Styrene				
	Benzene				
ACRYLIC RESINS	Acrylonitile	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[60]
	Methylmethacrylate				
AS	Acrylonitrile	nd	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[60]
	Styrene				
	Formaldehyde				
EVA (*i.e.* PEVA)[61]	Vinyl acetate	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU[60]
	Formaldehyde				
PA	Hexamethylendiamine	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU[60]
	Methanol				
	Benzene				
PET / PETG	Formaldehyde	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[60]
	Methyl alcohol				
	Butyl alcohol				
	Isobutyl alcohol				
PE / PP	Formaldehyde	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[60]
	Ethyl acetate				
	Methyl alcohol				
	Butyl alcohol				

Continued on next page

57 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

58 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

59 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

60 Use the appropriate Eurasian Economic Union method according to the "CU TR 007/2011 on safety products intended for children and teenagers".

61 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.

Children's tableware products intended to be used in contact with all types of foodstuffs[58]					
PE / PP	Isobutyl alcohol	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[60]
PS	Styrene	nd	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[60]
	Methyl alcohol				
	Butyl alcohol				
	Benzene				
MELAMINE	Children's tableware made of these materials are not allowed (according to EAEU regulation).				
PVC					
PC					

V. A. 1. 12. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 10/2011 of 14th January 2011 on Food Contact Materials made of plastic and its amendments.

– EU members are aligned with the European Union Positive List ("The Union List") declared on Commission Regulation 10/2011 and its amendments.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

– BfR III. Polyethylene.

– BfR V. Polystyrene Produced exclusively from the Polymerisation of Styrene.

– BfR VI. Styrene Copolymers and Graft Polymers, and Mixtures of Polystyrene with other Polymers.

– BfR VII. Polypropylene.

– BfR IX. Colorants for Plastics and other Polymers Used in Commodities

– BfR X. Polyamides.

– BfR XVII. Poly(terephthalic acid diol esters).

– BfR XXII. Polymers Based on Esters of Acrylic and Methacrylic Acids, their Copolymers, and Mixtures of these with other Polymers.

– Product Safety Act (Produktsicherheitsgesetz - ProdSG).

- **French regulation:**

– Décret 92-631

– Décret 2007-766

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/003).

• **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

• **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

• **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 9685-2016 National Food Safety Standard for Uses of Additives in Food Contact Materials and Their Products.

– GB 4806.6-2016 National Food Safety Standard for Plastic Resin Intended to Come into Contact with Food.

– GB 4806.7-2016 National Food Safety Standard for Plastic Materials and Articles Intended to Come into Contact with Food.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

– Positive List system for food utensils and containers and packaging. (Notification No. 196 of 2020).

• **USA regulation:**

– United States of America legislation by the Federal Drug Administration (FDA) - Code of Federal Regulations (CFR):

  – 21 CFR Part 174 on indirect food additives: general.

  – 21 CFR Part 175 on indirect food additives: adhesives and components of coatings.

  – 21 CFR Part 177 on indirect food additives: polymers.

  – 21 CFR Part 178 on indirect food additives: adjuvants, production aids and sanitizers.

• **Korean regulation:**

– “Korean Standards and Specifications for Utensils, Containers and Packages” 2019.

• **Taiwanese regulation:**

– Act Governing Food Sanitation.

– "Sanitation Standards for Food Utensils, Containers and Packages" and its amendments.

• **Colombian regulation:**

– Res. Nº 000683 (2012): *"Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption"*.

– Res. Nº 0004143 (2012): *"Technical regulation on sanitary requirements for plastic and elastomeric materials, objects, containers and equipment and their additives, intended to come into contact with foodstuffs and beverages for human consumption"*.

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: "General criteria for containers and equipment intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES. Nº 56/92: "General provisions for containers and equipment made of plastic intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES. Nº 02/12: "Positive list for monomers and other starting substances and polymers permitted in the manufacture of containers and equipment's made of plastic intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES. Nº 05/18: "Positive list for additives permitted in the manufacture of plastic materials and polymeric coatings intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES N° 15/10: "Permitted colouring agents for containers and equipment made of plastic intended to come into contact with foodstuffs".

• **Israeli regulation:**

– SI 5113 Plastic materials and plastic articles in contact with food and beverages.

• **GCC regulation:**

– GSO 2231:2012 on "General Requirements for the materials and articles intended to come into contact with food".

– GSO 1863:2013 on "Food packages – Part 2: Plastic package – General requirements".

• **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and teenagers.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. A. 1. 13. SUMMARY

The following is a comprehensive summary of the parameters previously discussed. It is included to provide a general picture of the global requirements.

Material	Test Items & Inditex Limits							
	OM	Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[62]	PAHs	Sensory Test
ABS	30 – 240 mg/kg	Acrylonitrile monomer	nd[63] - 0.02 mg/L (or 0.03 mg/m^3 [64])	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
			Residual: 11 ppm					
		1,3-Butadiene	Migration: nd[63]					
			Residual: 1 mg/kg					
		VOM	15 mg/dm^2					
		Styrene	0.010 (or 0.002 mg/m^3 [64])					
		Xylols (isomer mixture)	0.010 (or 0.002 mg/m^3 [64])					
		Alpha-Methylstyrene	0.100 (or 0.040 mg/m^3 [64])					
		Benzene	0.010 (or 0.100 mg/m^3 [64])					
		Toluene	0.500 (or 0.600 mg/m^3 [64])					
		Ethylbenzene	0.010 (or 0.020 mg/m^3 [64])					
		Benzaldehyde	0.003 (or 0.040 mg/m^3 [64])					
		Volatile Substances[66]	5000 mg/kg					
		Styrene monomer	0.5 %					

Continued on next page

62 This requirement include color, turbidity and sediment parameters. The color parameter only applies to colored plastics.

63 - Specific migration & Residual substances: nd= 0.01 (mg/kg).
- PAA:
  – PAAs listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006, and for which no migration limit is specified in Table 1 of Annex I of Regulation 10/2011: LOD (limit of detection): 0,002 mg/kg food simulant (each individual PAA).
  – For PAAs other than above, which no specific migration limit is specified in Annex I of Regulation 10/2011: LOD (limit of detection): 0,01 mg/kg food simulant (sum of PAAs).

64 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.

65 PAHs limit: <0.2 mg/kg (Naphthalene < 1mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: < 1mg/kg); Sum of 15 PAH < 1 mg/kg.
PAHs secondary limit: < 0.2 mg/kg (Naphthalene < 2 mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: < 5 mg/kg; Sum of 15 PAH < 5 mg/kg).
If the PAHs limits are surpassed but the PAHs sencondary limits are still met, the confirmation of suitability of the tableware product can be verified by an additional specific migration test of the PAH components. In this case, PAHs shall not be detected in the 1st migration extract (LOD (limit of detection): 0.01 mg/kg (sum of PAHs).

66 Testing Volatile substances (Japan) are: styrene, toluene, ethyl benzene, isopropyl benzene, propylbenzene.

Material	Test Items & Inditex Limits							
	OM	Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[62]	PAHs	Sensory Test
AS	30 – 240 mg/kg	Acrylonitrile monomer	nd[63]-0.02 mg/L (or 0.03 mg/m^3 [64])	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
			Residual: 50 ppm[67]					
		VOM	15 mg/dm^2					
		Styrene	0.010 mg/L (or 0.002 mg/m^3 [64])					
		Formaldehyde	0.100 mg/L (or 0.003 mg/m^3 [64])					
		Benzaldehyde	0.003 mg/L (or 0.040 mg/m^3 [64])					
		Volatile Substances[66]	5000 mg/kg					
		Styrene monomer	0.5 %					
ACRYLIC	30 – 50 mg/kg	Methyl methacrylates[68]	6 mg/kg	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
		Acrylates[69]	6 mg/kg					
		VOM	0.5 %					
		Peroxides	nd					
		Hexane	0.100 mg/L (or 0.085 mg/m^3 [64])					
		Heptane	0.100 mg/L (or 0.065 mg/m^3 [64])					
		Acrylonitile	0.020 mg/L (or 0.030 mg/m^3 [64])					
		Methylacrylate	0.020 mg/L (or 0.010 mg/m^3 [64])					
		Methylmethacrylate	0.250 mg/L (or 0.010 mg/m^3 [64])					
		Butyl acrylate	0.010 mg/L (or 0.0075 mg/m^3 [64])					
EVA (*i.e.* PEVA)[70]	30 – 50 mg/kg	Vinyl acetate	12 mg/kg - 0.02 (or 0.150 mg/m^3 [64])	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
		Formaldehyde	0.100 (or 0.003 mg/m^3 [64])					
		Hexane	0.100 (or 0.085 mg/m^3 [64])					
		Heptane	0.100 (or 0.065 mg/m^3 [64])					
		Acetaldehyde	0.200 (or 0.010 mg/m^3 [64])					

Continued on next page

67 This limit applies to articles produced by 45-65 parts by weight of acrylonitrile and 35-55 parts by weight of styrene. Articles made of this specific concentration of monomers, shall not be used at temperatures that exceeds 93ºC.
For articles produced by 66-72 parts by weight of acrylonitrile and 28-34 parts by weight of styrene and intended to use in contact with:
– nonalcoholic beverages at a usage temperature up to 65ºC, the applicable limit shall be 80 ppm.
– beverages containing up to 8 % alcohol and nonalcoholic beverages, at a usage temperature up to 65ºC, the applicable limit shall be 0.10 ppm.

68 Only in compliance with the polymers and copolymers containing methacrylic acid derivatives. [2-methylpropenoic acid; methyl methacrylate; ethyl methacrylate; isobutyl methacrylate; butyl methacrylate; phenol, polymer with (R)-1-methyl-4-(1-methylethenyl) cyclohexene; 2-methyl-2-propenoicacianhydride; 2-hydroxyethyl-2-methyl-2-acrylate; phenyl methacrylate; 2-propenoic acid, 2-me thyl-, propyl ester; benzyl methacrylate; sec-butyl methacrylate; iso-propyl methacrylate].

69 Only in compliance with the polymers and copolymers containing acrylic acid derivatives. [Polyacrylate; propenoic acid; methyl acrylate; 2-propenoic acid-2-methylpropyl ester; ethyl acrylate; butyl acrylate; iso-propyl acrylate; 2-hydroxyethyl acrylate; Propyl acrylate; 2-Propenoic acid, 1,1-dimethylethyl ester; Propenoic acid benzyl ester; 2-propenoic acid, octyl ester; Sec-butyl acrylate; 2-propenoic acid, polymer with 2-ethylhexyl 2-propenoate].

70 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.

Material	Test Items & Inditex Limits							
	OM	Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[62]	PAHs	Sensory Test
MELAMINE	30 – 50 mg/kg	Formaldehyde	4 mg/L	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
			0.100 mg/L (or 0.003 mg/m^3 [64])					
		Melamine monomer	2.5 /1 mg/kg					
		Phenol	5 mg/L					
PA	30 – 50 mg/kg	Caprolactam	15 mg/kg	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
			0.500 mg/L (or 0.060 mg/m^3 [64])					
		Hexamethylen-diamine	2.4 mg/kg					
		Ethylene-diamine	12 mg/kg					
			0.010 mg/L (or 0.001mg/m^3 [64])					
		Laurolactam	5 mg/kg					
		Peroxides	nd					
		Methanol	0.200 mg/L (or 0.500 mg/m^3 [64])					
		Benzene	0.010 mg/L (or 0.100 mg/m^3 [64])					
		Phenol	0.050 mg/L (or 0.003 mg/m^3 [64])					
PE/PP	30 – 50 mg/kg	Peroxides[71]	nd	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
		Formaldehyde	0.100 mg/L (or 0.003 mg/m^3 [64])					
		Acetaldehyde	0.200 mg/L (or 0.010 mg/m^3 [64])					
		Ethyl acetate	0.100 mg/L (or 0.100 mg/m^3 [64])					
		Hexane	0.100 mg/L (or 0.085 mg/m^3 [64])					
		Heptane	0.100 mg/L (or 0.065 mg/m^3 [64])					
		Acetone	0.100 mg/L (or 0.350 mg/m^3 [64])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m^3 [64])					
		Propyl alcohol	0.100 mg/L (or 0.300 mg/m^3 [64])					
		Isopropyl alcohol	0.100 mg/L (or 0.600 mg/m^3 [64])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [64])					
		Isobutyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [64])					

Continued on next page

71 This requirement only applies to PE.

Material	Test Items & Inditex Limits							
	OM	Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[62]	PAHs	Sensory Test
PET / PETG	30 – 50 mg/kg	Terephthalic acid	7.5 mg/kg	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
		Acetaldehyde	6 mg/kg					
			0.200 mg/L (or 0.010 mg mg/m^3 [64])					
		Isophthalic acid	5.0 mg/kg					
		Ethylene glycol	30 mg/kg					
			1.000 mg/L (or 1.000 mg/m^3 [64])					
		Dimethyl terephthalate	1.500 mg/L (or 0.010 mg/m^3 [64])					
		Formaldehyde	0.100 mg/L (or 0.003 mg/m^3 [64])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m^3 [64])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [64])					
		Isobutyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [64])					
		Acetone	0.100 mg/L (or 0.350 mg/m^3 [64])					
PLA	30 – 50 mg/kg	Total lactic acid	30 mg/L	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
POM	30 – 50 mg/kg	Formaldehyde	4 mg/L	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
PS	30 – 240 mg/kg	VOM	15 mg/dm^2	10 mg/kg	nd[63]	nd	note[65]	≤ 2.5 / ≤ 1
		Volatile substances[66]	5000 mg/kg					
		Styrene monomer	0.5 %					
		Peroxides	nd					
		Styrene	0.010 mg/L (or 0.010 mg/m^3 [64])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m^3 [64])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [64])					
		Benzene	0.010 mg/L (or 0.100 mg/m^3 [64])					
		Toluene	0.500 mg/L (or 0.600 mg/m^3 [64])					
		Ethylbenzene	0.010 mg/L (or 0.020 mg/m^3 [64])					

Metal migration				
Material	**Parameter**	**Limit**	**Units**	**Method**
ABS, AS, ACRYLIC, EVA (*i.e.* PEVA)[72], MELAMINE, PA, PE, PET, PLA, POM, PP, PS	Al	1.00	mg/kg	GBEN-metals[73] (ICP-MS or ICP-OES analysis)
	B	0.5	mg/kg	
	Ba	1.00	mg/kg	
	Cd	nd (0.01)	mg/kg	
	Co	0.05	mg/kg	
	Cr	0.01	mg/kg	
	Cu	5.00	mg/kg	
	Eu	0.05	mg/kg	
	Gd	0.05	mg/kg	
	Hg	nd (0.005)	mg/kg	
	Ge[74]	0.1	mg/kg	
	Fe	48	mg/kg	
	Mn	0.60	mg/kg	
	Ni	0.02	mg/kg	
	La	0.05	mg/kg	
	Li	0.60	mg/kg	
	Pb	nd (0.01)	mg/kg	
	Sb	0.04	mg/kg	
	Sn	0.01	mg/kg	
	Tb	0.05	mg/kg	
	Zn	5.00	mg/kg	
	Others[75]	0.01	mg/kg	

Metal Content									
Material	**Limit (mg/kg)**								**Method**
	Cd	**Cr**	**Hf**	**Pb**	**V**	**Zn**	**Zr**	**Sum of Pb, Cd, Cr (VI) and Hg**	
ABS, AS, ACRYLIC RESINS, EVA (*i.e.* PEVA)[76], MELAMINE, PA, PLA, POM and PS	nd			nd				100	Acid digestion / ICP
PE and PP	nd	10	100	nd	20		100	100	
PET[77]	nd			nd		80		100	
nd: < 2 mg/kg									

72 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.
73 See protocol in section V. A. 11
74 This parameter only applies to PET.
75 As, Ag, Mo, Bi.
76 This material does not include 'EVA rubber' (i.e. vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.
77 For PET articles, besides complying with the metal content limits shown previously, the metal content shall not exceed the following limits: antimony (Sb): 350 mg/kg; gallium (Ga): 20 mg/kg; germanium (Ge): 100 mg/kg; cobalt (Co): 125 mg/kg; lithium (Li): 130 mg/kg; manganese (Mn): 140 mg/kg; titanium (Ti): 120 mg/kg; phosphorous (P): 125 mg/kg.

Additional requirements for children's tableware made of plastic			
Material	**Parameter**	**Limit**	**Units**
ABS	Acrylonitrile	nd	mg/L
	Styrene		
	Benzene		
ACRYLIC RESINS	Acrylonitile	nd	mg/L
	Methylmethacrylate		
AS	Acrylonitrile	nd	mg/L
	Styrene		
	Formaldehyde		
EVA (*i.e.* PEVA)[78]	Vinyl acetate	nd	mg/L
	Formaldehyde		
PA	Hexamethylendiamine	nd	mg/L
	Methanol		
	Benzene		
PET / PETG	Formaldehyde	nd	mg/L
	Methyl alcohol		
	Butyl alcohol		
	Isobutyl alcohol		
PE / PP	Formaldehyde	nd	mg/L
	Ethyl acetate		
	Methyl alcohol		
	Butyl alcohol		
	Isobutyl alcohol		
PS	Styrene	nd	mg/L
	Methyl alcohol		
	Butyl alcohol		
	Benzene		
MELAMINE	Children's tableware made of these materials are not allowed (according to EAEU regulation).		
PVC			
PC			

Further information related to the aforementioned parameters is detailed in previous sections of this chapter.

78 This material does not include 'EVA rubber' (*i.e.* vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %). See section V. A. 2 for 'EVA rubber' requirements.

V. A. 2. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS MADE OF RUBBER AND / OR SILICON RUBBER

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V. A. 2. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS MADE OF RUBBER AND / OR SILICON RUBBER

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to rubber and silicon rubber materials included in Annexes I and II of this Standard. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of tableware products made of rubber and/or silicon rubber. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. A. 2. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table according to the type of elastomeric material:

Tableware products intended to be used in contact with all types of foodstuffs[79]				
Material	**Limit**	**Units**	**Test conditions[80]**	**Method**
RUBBER and SILICON RUBBER (except nursing utensils)[81]	50	mg/kg	10 % EtOH	GB 4806.11
			4 % HOAc	
	50	mg/kg	Vegetal oil	EN 1186
	60	mg/kg	50 % EtOH	GB 4806.11

V. A. 2. 3. SPECIFIC MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the following parameters:

– For articles made of vulcanized thermoplastic elastomer, the Supplier must refer to the provisions specified in Chapter V. A. 1.

– For articles made of natural rubber, synthetic rubber (including BR, NBR, IR, ethylidene norborene copolymers, EVA, E/NB and fluorocarbon rubbers) and silicone rubber the Supplier must comply with the parameters specified in the following table:

Tableware products intended to be used in contact with all types of foodstuffs[82]					
Material	**Parameter**	**Limit**	**Units**	**Test conditions[83]**	**Method**
RUBBER (except nursing utensils)[84]	Nitrosamine	0.001	mg/dm^2	3 % HOAc; 10 % EtOH; vegetable oil	EN 13130
	Nitrostable substances	0.01	mg/dm^2		
	Phenol	5	mg/L	4 % HOAc	SK[85]
	Formaldehyde	3[86]	µg/mL	3 % HOAc	LFGB
	VOM	0.5	%	-	LFGB
	Peroxides	nd	-	-	European Pharmacopoeia

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79 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

80 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.

81 See definition in Annex III.

82 Tableware products intended to come into contact with all types of food stuffs shall be analysed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

83 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

84 See definition in Annex III.

85 Use the appropriate Korean methods according to the material used. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.

86 Sum of migration of hexamethylenetetramine and formaldehyde: ≤ 15 mg/kg.

Tableware products intended to be used in contact with all types of foodstuffs[82]					
Material	**Parameter**	**Limit**	**Units**	**Test conditions[83]**	**Method**
SILICONE RUBBER[84]	Organotin (as tin)	Absent[87]	mg/kg	3 % HOAc	EN 13130
	Peroxide	Absent[88]	%	-	LFGB
	VOM	0.5	%	-	LFGB
	Formaldehyde	0.100 (or 0.003 mg/ m^3 [89])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[90]
	Acetaldehyde	0.200 (or 0.010 mg/ m^3 [89])	mg/L		
	Phenol	0.050 (or 0.003 mg/ m^3 [89])	mg/L		
	Methyl alcohol	0.200 (or 0.500 mg/ m^3 [89])	mg/L		
	Butyl alcohol	0.500 (or 0.100 mg/ m^3 [89])	mg/L		
	Benzene	0.010 (or 0.100 mg/ m^3 [89])	mg/L		

In addition, articles made of BR, NBR, IR, ethylidene norborene copolymers, EVA and E/NB rubbers must comply with their own specific migration requirements, which are included in the following table:

Tableware products intended to be used in contact with all types of foodstuffs[91]					
Material	**Parameter**	**Inditex Limit**	**Units**	**Test conditions[92]**	**Method**
BR	1,3-Butadiene	nd (0.01)	mg/kg	4 % HOAc 10 % EtOH 50 % EtOH	GB 31604.12
NBR	1,3-Butadiene	nd (0.01)	mg/kg	4 % HOAc 10 % EtOH 50 % EtOH	GB 31604.12
	Acrylonitrile	nd (0.01)	mg/kg		GB 31604.17
IR	2-Methyl-1,3-butadiene (isoprene)	nd (0.01)	mg/kg	4 % HOAc 10 % EtOH 50 % EtOH	GB 31604.1 followed by GC–MS
ETHYLIDENE NORBORENE COPOLYMERS	5-Ethylidene-2-norborene	0.05	mg/kg	4 % HOAc 10 % EtOH 50 % EtOH	GB 31604.1 followed by GC–MS
EVA (*i.e.* PEVA) RUBBER[93]	Vinyl acetate	12	mg/kg	4 % HOAc 10 % EtOH	GB 31604.20
E/NB	Bicyclo (2,2,1) hept-2-ene	0.05	mg/kg	4 % HOAc 10 % EtOH 50 % EtOH	GB 31604.1 followed by GC–MS

87 LOD (limit of detection): 0.01 mg/kg.
88 LOD (limit of detection): 0.005 % plastic.
89 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.
90 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16." or "CU TR 007/2011 on safety products intended for children and teenagers".
91 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.
92 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
93 Vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %. See section V. A. 1 for non-vulcanized EVA requirements.

V. A. 2. 4. RESIDUAL SUBSTANCES

To ensure compliance with Inditex requirements, the Supplier shall review the residual amount of the substances specified in the following table:

Material	Parameter	Limit	Units	Method
BR / NBR	1,3-Butadiene	1	mg/kg	SK[94] or GB 31604.12
IR	2-Methyl-1,3- butadiene (isoprene)	1	mg/kg	GC–MS
RUBBER (containing chlorine)	2-Mercaptoimidazoline	nd	mg/kg	SK[94]
NATURAL RUBBER	Boric acid	nd	mg/kg	GC-MS
	Pentachlorophenol and its sodium salts			
	Hydroxylamine			
	p-Nitrophenol			

V. A. 2. 5. METALS

To ensure compliance with Inditex requirements, the Supplier shall review the metal migration and metal content requirements specified in the following tables according to the specific elastomeric material:

Metal Migration				
Material	**Parameter**	**Limit**	**Units**	**Method**
RUBBER / SILICON RUBBER[95]	Al	1	mg/kg	GBEN-metals[96] (ICP-MS or ICP-OES analysis)
	Ba	1	mg/kg	
	Cd	0.002	mg/kg	
	Co	0.05	mg/kg	
	Cu	4[97]	mg/kg	
	Fe	48	mg/kg	
	Mn	0.60	mg/kg	
	Li	0.60	mg/kg	
	Ni	0.02	mg/kg	
	Pb	nd	mg/kg	
	Sb	0.04	mg/kg	
	Zn	5 or 1[98]	mg/kg	
	Others[99]	0.01	mg/kg	
nd: < 0.01 mg/kg				

Metal Content Limits				
Material	**Pb; Cd; Sb; Hg; As**	**Zn**	**Sum of Pb, Cd, Cr (VI) and Hg**	**Method**
	mg/kg	**mg/kg**	**mg/kg**	
RUBBER[95]	1	1-3 %[100]	100	Acid digestion / ICP
SILICONE RUBBER[95]	nd		100	
nd: < 2 mg/kg				

94 Use the appropriate Korean methods according to the food contact material used. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.
95 See definition in Annex III.
96 See protocol in section V. A. 11.
97 This requirement only applies to rubber articles.
98 1 mg/kg for nursing utensils made of rubber.
99 As, Ag, Mo, Bi.
100 BfR XXI: 3 %: general articles; 1 %: articles with direct contact with the mouth.

V. A. 2. 6. POTASSIUM PERMANGANATE - $KMnO_4$ - CONSUMPTION

To ensure compliance with Inditex requirements, the Supplier shall review the potassium permanganate consumption as specified in the following table:

Material	Limit	Units	Test Conditions	Method
RUBBER (except nursing utensils)[101]	10	mg/kg	Water; 60ºC; 0.5 h	GB 31604.2
SILICON RUBBER[101]			Water; 60ºC; 0.5 h	

V. A. 2. 7. COLOUR MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the colour migration as specified in the following table:

Material	Parameter	Limit	Test Method
RUBBER and SILICON RUBBER [101]	Color	No detection	ITX-GB 31604.7[102]
SILICON RUBBER	Turbidity and sediment		Instr. No. 880-71

V. A. 2. 8. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

To ensure compliance with Inditex requirements, the Supplier shall review all the parameters specified in the following table:

Material	Parameter	CAS No	Limit[103] (mg/kg)	Secondary limit (mg/kg)
RUBBER and SILICON RUBBER[104]	Benzo(a)pyrene	50-32-8	< 0.2	< 0.2
	Benzo(e)pyrene	192-97-2	< 0.2	< 0.2
	Benzo(a)anthracene	56-55-3	< 0.2	< 0.2
	Benzo(b)fluoranthene	205-99-2	< 0.2	< 0.2
	Benzo(j)fluoranthene	205-82-3	< 0.2	< 0.2
	Benzo(k)fluoranthene	207-08-9	< 0.2	< 0.2
	Chrysene	218-01-9	< 0.2	< 0.2
	Dibenzo(a,h)anthracene	53-70-3	< 0.2	< 0.2
	Benzo(ghi)perylene	191-24-2	< 0.2	< 0.2
	Indeno (1,2,3-cd)pyrene	193-39-5	< 0.2	< 0.2
	Phenanthrene	85-01-8	< 1 Sum	< 5 Sum
	Pyrene	129-00-0		
	Anthracene	120-12-7		
	Fluoranthene	206-44-0		
	Naphthalene	91-20-3	< 1	< 2
	Sum of 15 PAH		< 1	< 5

101 See definition in Annex III.

102 According to Inditex' own requirements the colour migration shall be determined only according to GB 31604 (4.5.3).

103 If the PAHs limits are surpassed but the secondary limits are still met, the confirmation of suitability of the tableware product can be verified by an additional specific migration test of the PAH components according to the EN 13130 test method followed by GC-MS analysis. To comply with Inditex requirements, PAHs shall not be detected in the 1st migration extract (LOD (limit of detection): 0.01 mg/kg (sum of PAHs). If applicable, the PAHs specific migration shall be determined using the following test conditions:
Food simulants: Tableware products intended to come into contact with all types of food stuffs shall be analyzed in 10 % EtOH, 3 % HOAc and vegetal oil. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section 4 of chapter V. A. 10 as reference.
Contact time and temperature: See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

104 See definition in Annex III.

V. A. 2. 9. PRIMARY AROMATIC AMINES

To ensure compliance with Inditex requirements, the Supplier shall review the primary aromatic amines specific migration as specified in the following table:

Material	Parameter	Limit	Test conditions[105]	Test Method
RUBBER and SILICON RUBBER[106]	Primary aromatic amines	nd[107]	3 % HOAc	EN13130-1:2004 and Kunststoffe im lebensmittelverkehr Book Teil B II XXI
RUBBER	Primary and secondary aromatic amines	1 mg/kg		

V. A. 2. 10. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
RUBBER and SILICON RUBBER	≤ 2.5[108]	Adimensional	DIN 10955
SILICON RUBBER	≤ 1		Instr. No. 880-71

V. A. 2. 11. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware made rubber or silicone rubber					
Material	**Parameter**	**Limit**	**Units**	**Test conditions[109]**	**Method**
RUBBER (nursing utensils)[110]	Nitrostable substances content	0.1	mg/kg	Synthetic saliva	EN 12868
	Nitrosamine content	0.01	mg/kg		
				Dichloromethane	EAEU[111]
	Phenol	5	mg/L	4 % HOAc	SK[112]
		nd	mg/L	2 % HOAc + 2 % NaCl	EAEU[111]
	Formaldehyde	3[113]	µg/mL	3 % HOAc	LFGB
	VOM	0.5	%	-	LFGB

Continued on next page

105 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
106 See definition in Annex III.
107 LOD (limit of detection): 0.01 mg/kg (sum of PAA).
108 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation
109 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
110 See definition in Annex III.
111 Use the appropriate Eurasian Economic Union method according to the "CU TR 007/2011 on safety products intended for children and teenagers".
112 Use the appropriate Korean methods according to the material used. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".
113 Sum of migration of hexamethylenetetramine and formaldehyde: ≤ 15 mg/kg.
The limit of Formaldehyde for drinking equipment intended for children of 0 to 48 moths shall be 0.5 mg/L (method specified in EN 14350-2020).

Additional requirements for children's tableware made rubber or silicone rubber					
	Peroxides	nd	-	-	European Pharmacopoeia
	BHT[114]	0.3	mg/kg	4 % HOAc 50 % EtOH	GB 28482
	2,2'-Methylenebis-(6-tert-butyl-4-methylphenol)[114]	0.15	mg/kg		
	Phthalic anhydride	0.2	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[111]
	Zinc diethyldithiocarbamate	nd	mg/L		
	Pb		mg/L	2 % HOAc + 2 % NaCl	
	As		mg/L		
	$KMnO_4$ consumption	10	mg/kg	Water; 40ºC; 24 h	GB 31604.2
	OM	20[115]	mg/kg	Water (GB: 4 % HOAc; EN: 3 % HOAc)	GBEN–OM[116]
		60	mg/kg	50 % EtOH	GB 31604.8
		20	mg/kg	Vegetal oil	EN 1186
SILICONE RUBBER (nursing utensils)[110]	Formaldehyde	0.5	mg/L	3 % HOAc	EAEU[111]
		nd	mg/L	2 % HOAc + 2 % NaCl	
	BHT	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	
	Methyl alcohol				
	Butyl alcohol				
	Phenol	nd	mg/L	2 % HOAc + 2 % NaCl	
	Pb				
	As				
	Zn				
	OM	30	mg/kg	Water	GB 4806.2
		60	mg/kg	4 % HOAc	
		20	mg/article	Vegetal oil	EN 1186
		60	mg/kg	50 % EtOH	GB 4806.2

V. A. 2. 12. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to become in contact with food and its amendments.

– Directive 93/11/EEC on the release of N-nitrosamines and N-nitrosatable substances from rubber teats and soothers.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

114 Only applicable to natural rubber, cis 1,4-polyisoprene rubber pacifier.
115 The migration of ingredients of rubber teats and of the rubber parts of pacifiers must be determined in mg per teat or pacifier.
116 See protocol in section V. A. 11.

– BfR XV Silicones.

– BfR XXI Commodities based on natural and synthetic rubber.

– Product Safety Act (Produktsicherheitsgesetz - ProdSG).

• **French regulation:**

– Décret 92-631

– Décret 2007-766

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/003).

• **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

• **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

• **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 9685-2016 National Food Safety Standard for Uses of Additives in Food Contact Materials and Their Products.

– GB 4806.11-2016 National Food Safety Standard for Rubber Materials and Articles Intended to Come into Contact with Food.

– GB 4806.2-2015 National Food Safety Standard for Nipples.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **USA regulation:**

– United States of America legislation by the Federal Drug Administration (FDA) - Code of Federal Regulations (CFR):

  – 21 CFR Part 174 on indirect food additives: general.

  – 21 CFR Part 175 on indirect food additives: adhesives and components of coatings.

  – 21 CFR Part 177 on indirect food additives: polymers.

– 21 CFR Part 178 on indirect food additives: adjuvants, production aids and sanitizers.

• **Korean regulation:**

– " Korean Standards and Specifications for Utensils, Containers and Packages" 2019.

• **Taiwanese regulation:**

– Act Governing Food Sanitation.

– "Sanitation Standards for Food Utensils, Containers and Packages" and its amendments.

• **Colombian regulation:**

– Res. Nº 000683 (2012): "Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption".

– Res. Nº 0004143 (2012): "Technical regulation on sanitary requirements for plastic and elastomeric materials, objects, containers and equipment and their additives, intended to come into contact with foodstuffs and beverages for human consumption".

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: "General criteria for containers and equipment intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES Nº54/97: "General provisions for elastomeric containers and equipment intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES Nº 28/99: "Technical regulation on positive list for elastomeric containers and equipment intended to come into contact with foodstuffs".

• **Israeli regulation:**

– SI 5113 Plastic materials and plastic articles in contact with food and beverages.

• **GCC regulation:**

– GSO 2231:2012 on "General Requirements for the materials and articles intended to come into contact with food".

• **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and adolescents.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. A. 2. 13. SUMMARY

The following is a comprehensive summary of the parameters previously discussed. It is included to provide a general picture of the global requirements.

Material	Test Items & Inditex Limits							
	OM	Specific Migration & Residual Substances[117]		$KMnO_4$ Consumption	PAA	Colour Migration[118]	PAHs	Sensory Test
RUBBER (except nursing utensils)[119]	50 – 60 mg/kg	Nitrosamine	0.001 mg/dm^2	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5
		Nitrostable substances	0.1 mg/kg					
		Phenol	5 mg/ L					
		Formaldehyde	3 µg/mL					
		VOM	0.5 %					
		Peroxides	nd					
		2-Mercapto-imidazoline[122]	nd					
SILICONE RUBBER[107]	50 – 60 mg/kg	Organotin (as tin)	Absent mg/kg	10 mg/kg	nd[120]	nd[123]	note[121]	≤ 2.5 / ≤ 1
		Peroxide	Absent (0.005 %)					
		VOM	0.5 %					
		Formaldehyde	0.100 mg/L (or 0.003 mg/ m^3 [124])					
		Acetaldehyde	0.200 mg/L (or 0.010 mg/ m^3 [124])					
		Phenol	0.050 mg/L (or 0.003 mg/ m^3 [124])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/ m^3 [124])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/ m^3 [124])					
		Benzene	0.010 mg/L (or 0.100 mg/ m^3 [124])					
BR	note[125]	1,3-butadiene	nd[120]	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5
NBR	note[125]	1,3-butadiene	nd[120]	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5
		Acrylonitrile	nd[120]					

Continued on next page

117 Articles made of BR, NBR, IR, ethylidene norborene copolymers, EVA and E/NB rubbers, in addition to meeting their own requirements, must be in compliance with the specific migration requirements specified for rubber or rubber nursing utensils.
118 Only for coloured plastics.
119 See definition in Annex III.
120 nd: 0.01 mg/kg. Limit of sum of primary aromatic amines and secondary aromatic amines: 1 mg/kg.
121 PAHs limit: < 0.2 mg/kg (Naphthalene < 1 mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: < 1 mg/kg); Sum of 15 PAH < 1 mg/kg.
PAHs secondary limit: < 0.2 mg/kg (Naphthalene < 2 mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: < 5 mg/kg; Sum of 15 PAH < 5 mg/kg).
If the PAHs limits are surpassed but the PAHs secondary limits are still met, the confirmation of suitability of the tableware product can be verified by an additional specific migration test of the PAH components. In this case, PAHs shall not be detected in the 1st migration extract (LOD (limit of detection): 0.01 mg/kg (sum of PAHs).
122 Applicable only to rubber materials containing chlorine.
123 This requirement includes color, turbidity, and sediment parameters.
124 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.
125 Articles made of BR, NBR, IR, ethylidene norborene copolymers, EVA, E/NB and fluorocarbon rubbers must be in compliance with the overall migration requirements specified for rubber or rubber nursing utensils.

Material	Test Items & Inditex Limits							
	OM	Specific Migration & Residual Substances[117]		$KMnO_4$ Consumption	PAA	Colour Migration[118]	PAHs	Sensory Test
IR	note[125]	2-methyl-1,3-butadiene (isoprene)	nd[120]	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5
ETHYLIDENE NORBORENE COPOLYMERS	note[125]	5-ethylidene-2-norborene	0.05 mg/kg	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5
EVA RUBBER[126]	note[125]	Vinyl acetate	12 mg/kg	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5
E/NB	note[125]	Bicyclo (2,2,1) hept-2-ene	0.05 mg/kg	10 mg/kg	nd[120]	nd	note[121]	≤ 2.5

Additional requirements for children's tableware made rubber or silicone rubber			
Material	**Parameter**	**Limit**	**Units**
RUBBER (nursing utensils)[127]	OM	20 - 60	mg/kg
	Nitrostable substances content	0.1	mg/kg
	Nitrosamine content	0.01	mg/kg
	Phenol	5	mg/L
		nd	mg/L
	Formaldehyde	3	µg/mL
	VOM	0.5	%
	Peroxides	nd	-
	BHT[128]	0.3	mg/kg
	2,2'-Methylenebis- (6-tert-butyl-4-methylphenol)	0.15	mg/kg
	Phthalic anhydride	0.2	mg/L
	Zinc diethyldithiocarbamate	nd	mg/L
	Pb		mg/L
	As		mg/L
	$KMnO_4$ consumption	10	mg/kg

Continued on next page

126 Vulcanized thermoplastic elastomer with a content of vinyl acetate more than 40 %. See section V. A. 1 for non-vulcanized EVA requirements.
127 See definition in Annex III.
128 Only applicable to natural rubber, cis 1,4-polyisoprene rubber pacifier.

Additional requirements for children's tableware made rubber or silicone rubber			
Material	**Parameter**	**Limit**	**Units**
SILICONE RUBBER (nursing utensils)[129]	OM	20 - 60	mg/kg
	Formaldehyde	nd	mg/L
	BHT		
	Methyl alcohol		
	Butyl alcohol		
	Phenol	nd	mg/L
	Pb		
	As		
	Zn		

Metal Migration				
Material	**Parameter**	**Limit**	**Units**	**Method**
RUBBER / SILICON RUBBER[129]	Al	1	mg/kg	GBEN-metals[130] (ICP-MS or ICP-OES analysis)
	Ba	1	mg/kg	
	Cd	nd	mg/kg	
	Co	0.05	mg/kg	
	Cu	4	mg/kg	
	Fe	48	mg/kg	
	Mn	0.60	mg/kg	
	Li	0.60	mg/kg	
	Ni	0.02	mg/kg	
	Pb	nd	mg/kg	
	Sb	0.04	mg/kg	
	Zn	5 or 1[131]	mg/kg	
	Others[132]	0.01	mg/kg	
nd: < 0.01 mg/kg				

Metal Content Limits				
Material	**Pb; Cd; Sb; Hg; As**	**Zn**	**Sum of Pb, Cd, Cr (VI) and Hg**	**Method**
	mg/kg	**mg/kg**	**mg/kg**	
RUBBER[127]	1	1-3[133]	100	Acid digestion / ICP
SILICONE RUBBER[127]	nd		100	
nd: < 2 mg/kg				

129 See definition in Annex III.
130 See protocol in section V. A. 11
131 1 mg/kg for nursing utensils made of rubber.
132 As, Ag, Mo, Bi.
133 BfR XXI: 3 %: general articles; 1 %: articles with direct contact with the mouth.

V. A. 3. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS MADE OF CERAMIC OR GLASS

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V. A. 3. 1. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier should review the overall migration as specified in the following table.

Material	Limit	Units	Test conditions	Method
CERAMIC (glazed, unglazed and decorated) **/ GLASS AND CRYSTAL**	50	mg/kg	Water, 121ºC; 3 autoclave cycles[134]	MERCOSUR/GMC/RES Nº 55/92

V. A. 3. 2. LEAD, CADMIUM & OTHER HEAVY METALS

Test method ITX- EN1388-1/2

Migration method: the method to be used is based on the European standard EN1388-1/2 (test conditions: 4 % acetic acid; 24 h; 22ºC), but according to Inditex requirements three successive extractions must be carried out in the test. Finally, the 1st and 3rd extractions will be analysed:

– For 1st extraction results: metal limits specified in the table shown in part 1 of this section must be considered.

– For 3rd extraction results: metal limits specified in the table shown in part 2 of this section must be considered.

Analysis method: all the metals will be analysed by AAS (Atomic Absorption spectrophotometry), ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrophotometry) or ICP-MS (Inductively Coupled Plasma - Mass Spectrometry); except Cr (VI), by diphenylcarbazide colorimetry according to NF T 90-043 or any other equivalent method.

134 Migration extraction step shall be performed in an autoclave following the next cycle: 20 min to reach 100ºC, 10 min at 100ºC, 2 min to reach 121ºC, 30 min at 121ºC, 42 min for cooling down to 80ºC and 10 to 20 min to cool down to room temperature.

1. FIRST MIGRATION LIMITS FOR TABLEWARE PRODUCTS MADE OF CERAMIC AND / OR GLASS

a) Tableware products made of ceramic:

Material	Type of Product[135]		Parameter	Limit	Units	Method
CERAMIC (glazed, unglazed and decorated)	Cat. 1	Flatware (depth < 25 mm)	Pb	2[136]	mg/L	ITX-EN 1388-1/2
			Cd	0.07	mg/dm^2	
			Co	0.1	mg/dm^2	
	Cat. 2	Small Hollowware (depth > 25 mm) (< 1.1 L)	Pb	2[136]	mg/L	ITX-EN 1388-1/2
			Cd	0.3[137]	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
		Cup/Mug	Pb	0.5[136]	mg/L	ITX-EN 1388-1/2
			Cd	0.05	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
		Large Hollowware (depth > 25 mm) (1.1-3 L)	Pb	1[137]	mg/L	ITX-EN 1388-1/2
			Cd	0.25	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
	Cat. 3	Large Hollowware (depth > 25 mm) (> 3 L)	Pb	0.5[137]	mg/L	ITX-EN 1388-1/2
			Cd	0.1	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
		Pitchers (> 3 L)	Pb	0.5[137]	mg/L	ITX-EN 1388-1/2
			Cd	0.1	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
	-	Lip & Rim area (drinking vessels)	Pb	2.0	mg/ article	ITX-EN 1388-1/2
			Cd	0.2	mg/ article	
			Co	0.05	mg/L	

Additional requirements for tableware products made of ceramic					
	Type of products	Parameter	Limit	Unit	Method
CERAMIC (glazed, unglazed and decorated)	All type of tableware products	B	0.500	mg/L	ITX-EN 1388-1/2
		Zn	1.000	mg/L	
		Ti	0.100	mg/L	
		Al	0.500	mg/L	
		Ba	0.100	mg/L	
		Mn	0.100	mg/L	
		Cu	1.000	mg/L	
		Cr (III) and Cr (VI)	0.100	mg/L	
		Li[138]	0.030	mg/L	

135 See product type definitions in Annex III and/or in the regulations mentioned in section V. A. 3. 5
136 If the Pb migration result exceeds 0.226 mg/kg for flatware or 0.1 mg/kg for hollowware and pitchers and the article is to be commercialized in California, a specific warning label must be included following the applicable Californian regulation.
137 If the Cd migration result exceeds 0.189 mg/kg for small hollowware or 0.049 mg/kg for large hollowware and pitchers and the article is to be commercialized in California, a specific warning label must be included following the applicable Californian regulation.
138 Only applies to porcelain articles.

b) Tableware products made of glass:

Material	Type of Product[139]		Parameter	Limit	Units	Method
GLASS AND CRYSTAL	Cat. 1	Flat container Flatware	Pb	0.25	mg/dm²	ITX-EN 1388-1/2
			Cd	0.07	mg/dm²	
			Co	0.1	mg/dm²	
			Cr (VI)[140]	0.005	mg/dm²	
	Cat. 2	Small container Hollowware (<600 mL)	Pb[141]	1.5	mg/L	ITX-EN 1388-1/2
			Cd[142]	0.3	mg/L	
			Co	0.05	mg/L	
			Cr (VI)[140]	0.03	mg/L	
		Cup and mugs	Pb[141]	0.5	mg/L	ITX-EN 1388-1/2
			Cd[142]	0.05	mg/L	
		Big Container Large ware (between 600 mL & 3 L)	Pb	0.75	mg/L	ITX-EN 1388-1/2
			Cd	0.25	mg/L	
			Co	0.05	mg/L	
			Cr (VI)[140]	0.03	mg/L	
	Cat. 3	Storage Tank Hollowware (> 3 L)	Pb	0.5	mg/L	ITX-EN 1388-1/2
			Cd	0.1	mg/L	
			Co	0.05	mg/L	
			Cr (VI)[140]	0.03	mg/L	
	Lip & Rim area (drinking vessels)		Pb	2.0	mg/article	ITX-EN 1388-1/2
			Cd	0.2	mg/article	
			Co	0.05	mg/L	
			Cr (VI)[140]	0.015	mg/L	

Additional requirements for tableware products made of glass and crystal					
	Type of products	Parameter	Limit	Unit	Method
GLASS AND CRYSTAL	All type of tableware products	Al	0.500	mg/L	ITX-EN 1388-1/2
		As	0.050	mg/L	
		B	0.500	mg/L	
		Ba	0.100	mg/L	
		Cr (III) and Cr (VI)	0.100	mg/L	
		Cu	1.000	mg/L	
		Mn	0.100	mg/L	

139 See product type definitions in Annex III and/or in the regulations mentioned in section V. A. 3. 5
140 Applies only to decorated glass and crystal.
141 The limit of Pb for drinking equipment intended for children of 0 to 48 moths shall be 0.01 mg/L.
142 The limit of Cd for drinking equipment intended for children of 0 to 48 moths shall be 0.003 mg/L.

2. THIRD MIGRATION LIMITS FOR TABLEWARE PRODUCTS MADE OF CERAMIC AND / OR GLASS

a) Tableware products made of ceramic:

Material	Type of Product[143]	Parameter	Limit (mg/L)	Method
CERAMIC (glazed, unglazed and decorated)	Flatware	Pb	0.8 mg/dm^2	ITX-EN1388-1/2
		Cd	0.07 mg/dm^2	
	Small Hollowware	Pb	2	
		Cd	0.3	
	Cup & mugs	Pb	0.5	
		Cd	0.25	
	Large Hollowware	Pb	1	
		Cd	0.25	
	Storage pitchers	Pb	0.5	
		Cd	0.25	
	All types of articles	Al	1	
		As	nd (0.002)	
		B	1	
		Ba	1	
		Co	0.02	
		Cr	0.1	
		Cu	4	
		Hg	0.005	
		Li	0.6	
		Mn	0.6	
		Ni	0.02	
		Sb	0.04	
		Se	0.01	
		Sr	1	
		Rb	1	
		Zn	3	

143 See product type definitions in Annex III and/or in the regulations mentioned in section V. A. 3. 5

b) Tableware products made of glass:

Material	Type of Product[144]	Parameter	Limit (mg/L)	Method
GLASS and CRYSTAL	Lip & rim[145]	Pb	4	ITX-EN1388-1/2
		Cd	0.4	
	All types of articles	Al	1	
		As	nd (0.002)	
		B	1	
		Ba	1	
		Cd	0.01	
		Ce	1	
		Co	0.02	
		Cr	0.1	
		Cu	4	
		Li	0.6	
		F	1	
		Mn	0.6	
		Ni	0.02	
		Pb	0.1	
		Sb	0.04	
		Rb	1	
		Zn	3	
		Zr	0.05	

V. A. 3. 3. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware made of ceramic, glass and crystal					
Material	**Type of products**	**Parameter**	**Limit**	**Unit**	**Method**
CERAMIC, GLASS AND CRYSTAL	Flatware, small hollowware, cup & mugs	Al	nd	mg/L	ITX-EN 1388-1/2
		As			
		Ba			
		B			
		Cd			
		Co			
		Pb			
		Li			
		Sb			

144 See product type definitions in Annex III and/or in the regulations mentioned in section V. A. 3. 5

145 Only applicable to glassware having external decoration in the marginal area within 20 mm from the mouth of the glassware in direct contact with the lips.

V. A. 3. 4. ADDITIONAL CONSIDERATIONS

In case the surface in contact with food of the article made of ceramic or glass is modified by treatment with a material different from ceramic or glass, the article should also be compliant with the requirements specified in Chapter V. A. 8 of this Standard.

V. A. 3. 5. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Council Directive of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs (84/500/EEC) and its amendment (2005/31/EC).

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

- **French regulation:**

– Décret 92-631

– Décret 2007-766

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/002).

- **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

– Ministerial Decree of 4 April 1985.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.4-2016 National Food Safety Standard for Ceramic ware.

– GB 4806.5-2016 National Food Safety Standard for Glass products.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **Korean regulation:**

– "Korean Standards and Specifications for Utensils, Containers and Packages" 2019.

• **Taiwanese regulation:**

– Act Governing Food Sanitation.

– "Sanitation Standards for Food Utensils, Containers and Packages" and its amendments.

• **USA regulation:**

– CPG 7117.06 leaching of Cadmium.

– CPG 7117.07 leaching of Lead.

– ASTM C927-1980 (2004) Lead and Cadmium extracted from the lip and rim area of glass tumblers externally decorated with ceramic glass enamels.

– California Proposition 65.

• **Canadian Regulation:**

– SOR/2016-175 on "Ceramic and Glassware Regulations".

• **Mexican Regulation:**

– PROY–NOM–231–SSA1–2016: "Articles made of glazed pottery, glazed ceramic, porcelain and glass. Maximum allowable limits for soluble lead and cadmium. Test Method."

• **Colombian regulation:**

– Res. Nº 000683 (2012): "Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption".

– Res. Nº 000835 (2013): "Technical Regulation on sanitary requirements for materials, articles, containers and equipment made of glass and ceramic intended to come into contact with foodstuffs and beverages for human consumption".

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: "General criteria for containers and equipment intended to come into contact with foodstuffs".

– MERCOSUR/GMC/RES Nº 03/92: "General provisions for containers and equipment made of glass and ceramic intended to come into contact with foodstuffs".

• **Israeli regulation:**

– SI 1003 Release of lead and cadmium from ware in contact with food.

• **GCC regulation:**

– GSO 2231:2012 on "General Requirements for the materials and articles intended to come into contact with food".

– GSO ISO 6486-2 (2013): Ceramic ware, glass-ceramic ware and glass dinnerware in contact with food –Release of lead and cadmium– Part 2: Permissible limits.

– GSO ISO 7086-2 (2013): Glass hollowware in contact with food —Release of lead and cadmium— Part 2: Permissible limits.

• **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and teenagers.

– GOST R ISO 7086-1- 2016 Glass hollowware in contact with food. Release of lead and cadmium. Part 1. Test method.

– GOST R ISO 6486-2007 Ceramic ware, glass-ceramic ware and glass dinnerware in contact with food. Release of lead and cadmium. Part 1. Test method.

V. A. 4. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS MADE OF METALS AND ALLOYS

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V. A. 4. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS MADE OF METALS AND ALLOYS

To comply with Inditex requirements, the Supplier shall review all the positive lists that are applicable to food contact materials made of metals and alloys included in Annex I and meet the composition requirements enclosed in Annex II of this Standard. Metals and alloys which are not compliant with both the applicable positive lists and the composition requirements shall not be used in the manufacture of tableware products made of metals and alloys.

V. A. 4. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table:

Material	Limit	Units	Test conditions[146]	Method
METALS & ALLOYS (other than stainless steel)	60	mg/kg	10 % EtOH, 3 % HOAc, and vegetal oil; 3rd migration extract	EN 1186
STAINLESS STEEL (except cutting items)	50	mg/kg	3 % HOAc; 3rd migration extract	IT[147]
STAINLESS STEEL (cutting items)	8	mg/dm^2		

V. A. 4. 3. HEAVY METALS MIGRATION & COMPOSITION

1. Metal content

a) General requirements for all types of metals and alloys

Maximum allowed level of heavy metal impurities	
Metals	**max (%)**
Pb	0.01
As	0.01
Hg	0.01
Cd	0.01[148]
Co	0.05[149]
Sum of (Sb+As+Cd+Cu+Hg+Pb)	1

b) Additional requirements for aluminium and aluminium alloys

Chemical composition of ALUMINIUM and ALUMINIUM ALLOYS		
Metals	**Aluminium max** (%)	**Aluminium Alloy max** (%)
Fe	Total: 1.0	2.0
Si		13.5
Cr	0.10	0.35
Mn	0.10	4.0
Mg	0.10	11

Continued on next page

146 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
147 Use the appropriate Italian method according to the Ministerial Decree of 21 March 1973 and its amendments (Chapter VI – Art. 37).
148 Only for articles made of steel, cast iron, tin and tin alloys, zinc and zinc alloys, and copper and copper alloys.
149 Only for metallic coatings of articles made of steel or stainless steel.

Chemical composition of ALUMINIUM and ALUMINIUM ALLOYS		
Metals	**Aluminium max** (%)	**Aluminium Alloy max** (%)
Ni	0.10	3.0
Zn	0.10	0.25
Ti	0.10	0.3
Sn	0.10	0.10
Cu	0.10	0.6[150]
Sb	0.10	0.2
Zr	0.10	0.3
Sr	0.10	0.2
As	0.10	0.05
Ta	0.10	0.05
Pb	0.05	0.05
Tl	0.05	0.05
Be	0.05	0.05
Sum of (As + Ta + Be + Tl + Pb)	-	≤ 0.15 %
All	> 99 %	Predominate

2. Metal migration

Material	Method[151]
Stainless Steel	EU Test Method and GB 31604.49 (Part 2)
Aluminium	EU Test Method and GB 31604.49 (Part 2)
Other metal or alloy	EU Test Method

– For all types of substrates: to show compliance with Inditex requirements, it is required to check conformity following the guidelines of the EU Test Method (Metals and alloys used in FCM and articles. Practical Guide. 1st edition, 2013). The migrations measured must be below the limits shown in the Metal and alloys column of the table A - Requirements for tableware products made of metals and alloys.

– For articles made of Aluminium or Stainless Steel: in addition to the test described in the previous paragraph, it is required to check conformity following the provisions of the Chinese method [GB 31604.49 (Part 2)]. The migrations measured must be below the limits shown in the appropriate Aluminium or Stainless Steel columns of the table A - Requirements for tableware products made of metals and alloys.

– Additionally, for metallic articles it is required to check conformity with requirements show in table B of this section.

– Metallic articles whose surface is treated with an organic coating shall comply with the requirements given in section V. A. 7

– Metallic articles manufactured with a glazed surface finish (porcelain enamel) shall comply with the requirements given in section V. A. 8

150 The copper content (Cu) can reach up to 6 % for articles intended for short-term contact.
151 For metal articles not intended to be put in contact with acid foodstuff or drinks, artificial tap water (DIN 10531) should be used as food simulant. For the rest of metal articles, citric acid 0.5 % should be used as the food simulant.
Nickel plating cannot be used in a surface in direct contact with the food.

	Table A- Requirements for tableware products made of metals and alloys			
	Metals and alloys		Aluminium	Stainless Steel
Migration test	1st + 2nd	3rd	3rd	3rd
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminium (Al)	35	2 mg/L		
Antimony (Sb)	0.28	0.04		
Arsenic (As)	0.014	0.002	0.04	0.04
Barium (Ba)	8.4	1.2		
Beryllium (Be)	0.07	0.01		
Bismuth (Bi)		1		
Cadmium (Cd)	0.035	0.005	0.02	0.02
Chromium (Cr)	1.75	0.1[152]		2.0[153]
Cobalt (Co)	0.14	0.02		
Copper (Cu)	28	4		
Iron (Fe)	280	40		
Lead (Pb)	0.07	0.01	0.2	0.05
Lithium (Li)	0.336	0.048		
Manganese (Mn)	12.6	0.6[154]		
Mercury (Hg)	0.021	0.003		
Molybdenum (Mo)	0.84	0.12		
Nickel (Ni)	0.98	0.07 mg/L		0.5
Silver (Ag)	0.56	0.08		
Thallium (Tl)	0.0007	0.0001		
Tin (Sn)	700	100		
Vanadium (V)	0.07	0.01		
Zinc (Zn)	35	5		
Zirconium (Zr)		2		
Method	Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013		GB 4806.9 with reference to GB 31604.49 (Part 2)	
Test conditions[155]	Citric acid 5 g/L[156]		4 % HOAc; boil 30 min and place at room temperature for 24 h	

152 Limit for articles made of cast iron with organic coating = 0.1 mg/kg. Chromium VI: nd (0.005 mg/dm^2).
153 This requirement does not apply to articles made of martensitic stainless steel. See Annex II.
154 Limit for Stainless Steel = 0.1 mg/kg.
155 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.
156 Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference. The test conditions for drinking equipment intended for children of 0 to 48 moths shall be citric acid 5 g/L for 24 h at 40ºC.

Table B- Additional requirements for tableware products made of metals and alloys					
	Steel and steel alloys	Aluminium and aluminium alloys	Cast iron	Brass	Others[157]
Units	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum (Al)	0.500	0.500		0.500	0.500
Antimony (Sb)				2.000	2.000[158]
Arsenic (As)					0.050
Beryllium (Be)					0.0002
Chromium (Cr III+Cr VI)	0.100		0.100		0.100
Copper (Cu)	1.000	1.000	1.000	1.000	1.000
Iron (Fe)	0.300	0.300	0.300	0.300	0.300
Lead (Pb)				0.030	0.030
Manganese (Mn)	0.100	0.100		0.100	0.100
Molybdenum (Mo)	0.250				0.250
Niobium (Nb)					0.010
Nickel (Ni)	0.100		0.100	0.100	0.100
Silicium (Si)	10.000	10.000		10.000	10.000
Tin (Sn)	0.100				0.100
Titanium (Ti)		0.100			0.100
Tungsten (W)	0.050				0.050
Vanadium (V)	0.100	0.100			0.100
Zinc (Zn)		1.000		1.000	1.000
Method	Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16." or "CU TR 007/2011 on safety products intended for children and teenagers".				
Test conditions	2 % HOAc + 2 % NaCl				

V. A. 4. 4. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
ALL METALS AND ALLOYS	≤ 2.5[159]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

157 Copper, titanium, iron-nickel alloys, bronze-tin alloys, copper-nickel alloys, nickel alloys, and titanium alloys.
158 The limit for tableware articles made of copper is 0.050 mg/L.
159 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

V. A. 4. 5. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware made of metal					
Material	**Type of products**	**Parameter**	**Limit**	**Units**	**Method**
Stainless Steel, aluminium, copper-nickel alloys	Cutlery and dishes intended to children	Al	nd	mg/L	EAEU[160]
		As			
		Ba			
		B			
		Cd			
		Co			
		Pb			
		Li			
		Sb			

V. A. 4. 6. ADDITIONAL CONSIDERATIONS

In case the surface in contact with food of the article made of metal is modified by treatment with a material different from metal, the article should also be compliant with the requirements specified in sections V. A. 7 and V. A. 8.

V. A. 4. 7. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to become in contact with food and its amendments.

– Resolution CM/ResAP(2013) on metals and alloys used in food contact materials and articles.

– Commission Regulation (EC) No. 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.

– Technical Guide on Metals and alloys used in food contact materials, Council of Europe, European Directorate for the Quality of Medicines & Healthcare.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

- **French regulation:**

– Décret 92-631.

– Décret 2007-766.

– Recommendation DGCCRF 2004–64 and its amendments (DM/4B/COM/001).

160 Use the appropriate Eurasian Economic Union method according to the "CU TR 007/2011 on safety products intended for children and teenagers".

• **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

– Ministerial Decree 195 of 6 August 2015.

• **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

• **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.9-2016 National Food Safety Standard for Food Contact Metal Materials and Article.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **Korean regulation:**

– "Korean Standards and Specifications for Utensils, Containers and Packages" 2019.

• **Taiwanese regulation:**

– Act Governing Food Sanitation.

– "Sanitation Standards for Food Utensils, Containers and Packages" and its amendments.

• **Colombian regulation:**

– Res. Nº 000683 (2012): *"Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption"*.

– Res. Nº 004142 (2012): *"Technical Regulation on sanitary requirements for metallic materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption"*.

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: *"General criteria for containers and equipment intended to come into contact with foodstuffs"*.

– MERCOSUR/GMC/RES Nº 46/06: *"General provisions for metallic containers, coatings, utensils, gaskets and equipment intended to come into contact with foodstuffs"*.

- **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and adolescents.

– GN 2.3.3.972-00 “Maximum admissible amounts of chemical substances, emitting from food contact materials”.

V. A. 5. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS MADE OF PAPER & BOARD

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V. A. 5. 13. SUMMARY 107

V. A. 5. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS MADE OF PAPER & BOARD

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to paper and board materials included in Annex I of this Standard. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of tableware products made of paper and board. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. A. 5. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table:

Material	Limit	Units	Test conditions[161]	Method
ALL TYPES OF PAPER & BOARD	30	mg/L	(FDA: 8 % EtOH; TW: water)	FDATW–OM[162]
			(FDA: 50 % EtOH; TW: 20 % EtOH)	
			(MERCOSUR: 3 % HOAc; TW: 4 % HOAc)	MERCOSUR-TW-OM[162]
			(FDA: n-heptane; GB: vegetable oil)	FDAGB–OM[162]

If the surface in contact with food of an article made of paper and board is modified by treatment with a material different from paper and board (*e.g.* organic coating), the article should be compliant with the requirements specified in section V. A. 7

V. A. 5. 3. METALS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Parameter		Limit	Units	Test conditions	Method
Metal content	As	3	mg/dm^2 paper	–	GB 31604.49 or GB 31604.38-1
	Pb	0.003	mg/dm^2 paper	Water extraction; rt, 24h or 80ºC, 2h[163]	EN 645 or EN 647 followed by EN 12498 analysis
	Cd	0.002	mg/dm^2 paper		
	Cr (III)	0.004	mg/dm^2 paper		
	Cr (VI)	nd	mg/dm^2 paper		
	Hg	0.002	mg/dm^2 paper		EN 645 or EN 647 followed by EN 12497 analysis
	Sum of Cd, Pb, Hg and Cr	100	mg/kg paper	–	Acid digestion–ICP

Continued on next page

161 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.
162 See protocol in section V. A. 11
163 Tableware products intended to be used at room temperature: rt, 24h (EN 645 test method); Tableware products intended to be used at high temperature: 80ºC, 2h (EN 647 test method).

Parameter		Limit	Units	Test conditions	Method
Metal migration	Ag	0.05	mg/kg	3 % HOAc[164]	EN 13130 (ICP-MS or ICP-OES analysis)
	As	0.01	mg/kg		
	Ba	1	mg/kg		
	B	0.5	mg/kg		
	Cd	0.01	mg/kg		
	Pb	1	mg/L		
	Cu	5	mg/kg		
	Cr	0.05	mg/kg		
	F	0.5	mg/kg		
	Hg	0.005	mg/kg		
	Sb	0.04	mg/kg		
	Sn	1.2	mg/kg		
	Zn	25	mg/kg		
	As	0.050	mg/L	2 % HOAc + 2 % NaCl	EAEU[165]
	Pb	0.030	mg/L		
	CrIII + CrVI	0.100	mg/L		
	Zn	1.000	mg/L		

V. A. 5. 4. POTASSIUM PERMANGANATE - $KMnO_4$ - CONSUMPTION

To ensure compliance with Inditex requirements, the Supplier shall review the potassium permanganate consumption as specified in the following table:

Material	Limit	Units	Test Conditions	Method
ALL TYPES OF PAPER AND BOARD	40	mg/kg	Water; 60ºC; 2 h	GB 31604.2

V. A. 5. 5. PRIMARY AROMATIC AMINES

To ensure compliance with Inditex requirements, the Supplier shall review the primary aromatic amines specific migration as specified in the following table:

Material	Limit	Test conditions[166]	Test Method
ALL TYPES OF PAPER AND BOARD	nd[167]	3 % HOAc	EN13130-1:2004 and Kunststoffe im lebensmittelverkehr Book Teil B II XXI

V. A. 5. 6. FLUORESCENT MATTER

To ensure compliance with Inditex requirements, the Supplier shall review the fluorescent matter as specified in the following table:

Material	Limit	Units	Method
ALL TYPES OF PAPER AND BOARD	Grade 5[168]	Adimensional	EN 648:2006

164 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.

165 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16." or "CU TR 007/2011 on safety products intended for children and teenagers".

166 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

167 LOD (limit of detection): 0.01 mg/kg (sum of PAA).

168 Scale: grade 1: 125 mg/L; grade 2: 31 mg/l; grade 3: 8 mg/L; grade 4: 3 mg/L and grade 5: nd.

V. A. 5. 7. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Type of product	Limit	Units	Method
PAPER & PAPERBOARD (except paper napkins and kitchen paper towels)	≤ 2.5[169]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71
PAPER NAPKINGS AND KITCHEN PAPER TOWELS	≤ 2.5		EN 1230-1 and EN 1230-2

V. A. 5. 8. MICROORGANISMS

Articles made of paper and board must comply with the requirements shown in the following table:

Parameter	Limit	Units	Method
Coliform	nd	- /50 cm^2	GB 14934
Salmonella (Pathogenic bacteria)	nd	- /50 cm^2	GB 14934
Mould	50	cfu/g	GB 4789.15

V. A. 5. 9. OTHER REGULATED SUBSTANCES AND PARAMETERS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Parameter	Limit	Units	Method
Glyoxal	1.5	mg/dm^2	DIN 54603-2008
AZO dyestuff content	nd[170]	–	EN 14362-1 and EN 14362-3
Formaldehyde	1	mg/dm^2	EN 645 or 647[171] followed by EN 1541 analysis
	0.100 (or 0.003 mg/m^3)[172]	mg/L	EAEU[173]
Colour migration test[174]	nd	-	EN 646
Turbidity and sediment			Instr. No. 880-71
Pentachlorophenol (PCP)	0.1	mg/kg paper	LFGB § 64 BVL B 82.02.8 or EN/ISO 15320
Polychlorinated biphenyls (PCB)	2	mg/kg paper	EN ISO 15318
Antimicrobial agents	nd	–	EN 1104

Continued on next page

169 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

170 Azo dyes must not be used in the manufacture of food-contact paper or paper board. Azo dyes are capable of decomposing into one or more aromatic amines. (nd: 30 mg/kg).

171 Tableware products intended to be used at room temperature: EN 645 test method (water extraction; rt, 24h); Tableware products intended to be used at high temperature: EN 647 test method (water extraction; 80ºC, 2h).

172 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.

173 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16." or "CU TR 007/2011 on safety products intended for children and teenagers".

174 This requirement is not applicable to paper and paper board intended to become in contact with dry, non-fatty foodstuffs.

Parameter	Limit	Units	Method
Ethyl acetate	0.100 (or 0.100 mg/ m^3 [172])	mg/L	EAEU[173]
Acetaldehyde	0.200 (or 0.010 mg/ m^3 [172])	mg/L	
Acetone	0.100 (or 0.350 mg/ m^3 [172])	mg/L	
Methyl alcohol	0.200 (or 0.500 mg/ m^3 [172])	mg/L	
Butyl alcohol	0.500 (or 0.100 mg/ m^3 [172])	mg/L	
Toluene	0.500 (or 0.600 mg/m^3 [172])	mg/L	
Benzene	0.010 (or 0.100 mg/m^3 [172])	mg/L	
Xylols (isomer mixture)[175]	0.010 (or 0.002 mg/m^3 [172])	mg/L	
Isopropyl alcohol[175]	0.100 (or 0.600 mg/m^3 [172])	mg/L	
Isobutyl alcohol[175]	0.500 (or 0.100 mg/m^3 [172])	mg/L	
B[a]pyrene[176]	nd	mg/L	
Hexane[176]	0.100 (or 0.085 mg/m^3 [172])	mg/L	
Heptane[176]	0.100 (or 0.065 mg/m^3 [172])	mg/L	

V. A. 5. 10. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware made of paper and paperboard					
Material	**Type of products**	**Parameter**	**Limit**	**Units**	**Method**
DISPOSABLE PAPER AND PAPERBOARD PRODUCTS	Specific migration	Ethyl acetate	nd	mg/L	EAEU[177]
		Formaldehyde			
		Methyl alcohol			
		Butyl alcohol			
		Isobutyl alcohol			
		Benzene			
	Metal migration	As			
		Ba			
		B			
		Cd			
		Pb			
		Sb			

175 This requirement is only applicable to articles made of paper board.
176 This requirement is only applicable to articles made of paper coated with wax.
177 Use the appropriate Eurasian Economic Union method according to the "CU TR 007/2011 on safety products intended for children and teenagers".

V. A. 5. 11. ADDITIONAL CONSIDERATIONS

If the article has an organic coating in contact with food shall also be compliant with the requirements specified in section V. A. 7 of this Standard.

V. A. 5. 12. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– European regulation: Resolution AP (2002) 1 "Paper and Board materials and articles intended to come into contact with foodstuffs".

– Commission directive 2003/2/EC of 6th January 2003.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 31. Test standard DIN 10955.

– BfR XXXVI. Paper and board for food contact.

- **French regulation:**

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/004).

- **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

– Ministerial Decree 195 of 6 August 2015.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1 -2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 9685-2016 National Food Safety Standard for Uses of Additives in Food Contact Materials and Their Products.

– GB 4806.8-2015 National Food Safety Standard for Food Contact Paper and Board Materials and Their Products.

• **USA regulation:**

– United States of America legislation by the Federal Drug Administration (FDA) - Code of Federal Regulations (CFR):

  – 21 CFR Part 174 on indirect food additives: general.

  – 21 CFR Part 176 on indirect food additives: paper and paperboard components.

  – 21 CFR Part 178 on indirect food additives: adjuvants, production aids and sanitizers.

• **Korean regulation:**

– "Korean Standards and Specifications for Utensils, Containers and Packages" 2019.

• **Japanese regulation:**

– "Voluntary Standard of Paper and Paperboard Intended for the Use for Food Contact" Japan Paper Association (JPA)

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **Taiwan regulation:**

– Act Governing Food Sanitation.

– "Sanitation Standards for Food Utensils, Containers and Packages" and its amendments.

• **Colombian regulation:**

– Res. Nº 000683 (2012): *"Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption".*

– Res. Nº 000834 (2013): *"Technical Regulation on sanitary requirements for cellulosic materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption.*

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: *"General criteria for containers and equipment intended to come into contact with foodstuffs".*

– MERCOSUR/GMC/RES Nº 40/15: *"General provisions for cellulosic materials, containers and equipment intended to come into contact with foodstuffs"*.

• **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and teenagers.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. A. 5. 13. SUMMARY

Test Item		Paper & board
OM		30 – 46 mg/kg
Metal Content	As	3 mg/dm²
	Cd	0.002 mg/dm²
	Cr (III)	0.004 mg/dm²
	Cr (VI)	nd mg/dm²
	Hg	0.002 mg/dm²
	Pb	0.003 mg/dm²
Sum of Cd, Pb, Hg and Cr content		100 mg/kg paper
Metal Migration	Ag	0.05 mg/kg
	As	0.01 mg/kg; 0.050 mg/L
	Ba	1 mg/kg
	B	0.5 mg/kg
	Cd	0.01 mg/kg
	Cu	5 mg/kg
	Cr	0.05 mg/kg; 0.100 mg/L
	Hg	0.005 mg/kg
	F	0.5 mg/kg
	Pb	1 mg/L; 0.030 mg/L
	Sb	0.04 mg/kg
	Sn	1.2 mg/kg
	Zn	25 mg/kg; 1.000 mg/L
$KMnO_4$ Consumption		40 mg/kg
PAA		nd[178]
Fluorescent Matter		Grade 5
Sensory Test		≤ 2.5
Coliform		nd
Pathogenic bacteria		nd
Mould		50 cfu/g
Glyoxal		1.5 mg/dm²
Azo dyestuff		nd[179]
Formaldehyde		1 mg/dm²
Colour Migration test		nd
Turbidity and sediment		nd
Pentachlorophenol residues		0.10 mg/kg
Polychlorinated biphenyls (PCB)		2 mg/kg
Antimicrobial agents		nd

Continued on next page

178 LOD = 0.01 mg/kg.
179 nd = 30 mg/kg.

Test Item	Paper & board
Ethyl acetate	0.100 mg/L (or 0.100 mg/ m^3 [180])
Acetaldehyde	0.200 mg/L (or 0.010 mg/ m^3 [180])
Acetone	0.100 mg/L (or 0.350 mg/ m^3 [180])
Methyl alcohol	0.200 mg/L (or 0.500 mg/ m^3 [180])
Butyl alcohol	0.500 mg/L (or 0.100 mg/ m^3 [180])
Toluene	0.500 mg/L (or 0.600 mg/ m^3 [180])
Benzene	0.010 mg/L (or 0.100 mg/ m^3 [180])
Xylols (isomer mixture)[181]	0.010 mg/L (or 0.002 mg/ m^3 [180])
Isopropyl alcohol [175]	0.100 mg/L (or 0.600 mg/ m^3 [180])
Isobutyl alcohol[175]	0.500 mg/L (or 0.100 mg/ m^3 [180])
B[a]pyrene[182]	nd
Hexane[176]	0.100 mg/L (or 0.085 mg/ m^3 [180])
Heptane[176]	0.100 mg/L (or 0.065 mg/ m^3 [180])

Additional requirements for children's tableware made of paper and paperboard		
Test item		**Disposable paper & paperboard products**
Specific migration	Ethyl acetate	nd
	Formaldehyde	
	Methyl alcohol	
	Butyl alcohol	
	Isobutyl alcohol	
	Benzene	
Metal migration	As	
	Ba	
	B	
	Cd	
	Pb	
	Sb	

180 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.
181 This requirement is only applicable to articles made of paper cardboard.
182 This requirement is only applicable to articles made of paper coated with wax.

V. A. 6. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS MADE OF WOOD AND OTHER NATURAL MATERIALS

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V. A. 6. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS MADE OF WOOD AND OTHER NATURAL MATERIALS

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to wood and other natural materials included in Annexes I and II of this Standard. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of tableware products. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. A. 6. 2. METALS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter		Limit	Units	Test conditions	Method
NATURAL WOOD[183] (uncoated)	**Metal content**	Pb	3	mg/kg wood	Water extraction; rt, 24 h or 80ºC, 2 h[184]	EN 645 or EN 647 followed by EN 12498
		Cd	0.5	mg/kg wood		
		Hg	0.3	mg/kg wood		EN 645 or EN 647 followed by EN 12497
		As	Absent[185]	mg/kg wood	–	Acid digestion-ICP
	Metal migration	Pb	1	mg/L	3 % HOAc[186]	EN 13130 (ICP-MS or ICP-OES analysis)
		As	0.01	mg/kg		
		B	1	mg/kg		
		Cr	0.1	mg/kg		
		Cu	5	mg/kg		
		Mn	0.5	mg/kg		
CORK STOPPERS AND OTHER CORK ARTICLES[187]	**Metal migration**	As	0.01	mg/kg		
		B	1	mg/kg		
		Cr	0.1	mg/kg		
		Cu	5	mg/kg		

V. A. 6. 3. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
NATURAL WOOD[188] (uncoated)**, CORK STOPPERS and OTHER CORK ARTICLES**[189]	≤ 2.5[190]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

183 See definition in Annex III.
184 Tableware products intended to be used at room temperature: rt, 24 h (EN 645 test method); Tableware products intended to be used at high temperature: 80ºC, 2 h (EN 647 test method).
185 LOD: 2 mg/kg.
186 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.
187 Cork stoppers and articles processed by one or several corks or accumulating granulated cork (see definitions in Annex III).
188 See definition in Annex III.
189 Cork stoppers and articles processed by one or several corks or accumulating granulated cork (see definitions in Annex III).
190 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

V. A. 6. 4. MICROORGANISMS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter	Limit	Units	Method
NATURAL WOOD[183] (uncoated) **/ DISPOSABLE CHOPSTICKS AND CORK ARTICLES** (other than cork stoppers)[183]	Coliform	nd	MPN/50 cm^2	GB 4789.3
	Pathogenic bacteria	nd	- /50 cm^2	GB 4789.4-.5-.10-.11
	Mould	50	cfu/g	GB 4789.15
CORK STOPPER[183]	Total number of colonies	1.00	cfu/piece	ISO 10718
	Mycete	5.00	cfu/piece	
	Yeast	1.0	cfu/piece	

V. A. 6. 5. OTHER REGULATED SUBSTANCES AND PARAMETERS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter	Limit	Units	Test conditions[191]	Method
NATURAL WOOD (uncoated)[192]	Formaldehyde	3	mg/kg	3 % HOAc	ENCR-Formaldehyde[193]
		0.1	m/L	2 % HOAc + 2 % NaCl	EAEU[194]
	Pentachlorophenol (PCP) residues	0.1[195]	mg/kg	–	SN/T 2278 or NF B51-297
	Pentachlorophenol (PCP) migration	150	ng/kg	10 % EtOH 3 % HOAc; Vegetal oil	SN/T 2204
	Trichlorophenol migration	2000	ng/kg or ng/L		
	Polychlorinated biphenyls (PCB) residues	2	mg/kg wood	–	EN ISO 15318
	Sulphur dioxide	12.80	mg/L	Water	SK[196]
	Thiabendazole[197]	1.80	mg/L	20 % EtOH	
	Ortho-phenylphenol[197]	7.3	mg/L		
	Biphenyl[197]	0.9	mg/L		
	Imazalil[197]	0.6	mg/L		
	Colour, turbidity and sediment.	nd	-	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	Instr. No. 880-71

Continued on next page

191 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
192 See definition in Annex III.
193 See protocol in section V. A. 11.
194 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16."
195 Limit for bamboo articles: 0.15 mg/kg
196 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packages. 2019. Part II".
197 The requirements for disposable bamboo chopsticks are the following:
Limit: 10 mg/kg.
Test method: GB 19790.2 Annex B.

Material	Parameter	Limit	Units	Test conditions[191]	Method
CORK STOPPERS[198]	Pentachlorophenol residues	0.15	mg/kg	–	SN/T 2278
	Pentachlorophenol migration	150	ng/kg or ng/L	10 % EtOH 3 % HOAc; Vegetal oil	SN/T 2204
	Trichlorophenol	2000	ng/kg or ng/L		
	Soaking Test	No granulated cork is separated from the polymer	Adimensional	–	SN/T 2595
	Residual oxidant	0.20	mg/piece	–	ISO/DIS 21128
	Colour migration	nd	–	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	Instr. No. 880-71
	Formaldehyde	0.100	mg/L	2 % HOAc + 2 % NaCl	EAEU[199]
OTHER CORK ARTICLES[198]	Sulphur Dioxide	600	mg/kg	–	GB 19790.1
	Pentachlorophenol residues	0.15	mg/kg	–	SN/T 2278
	Pentachlorophenol migration	150	ng/kg or ng/L	10 % EtOH 3 % HOAc; Vegetal oil	SN/T 2204
	Trichlorophenol	2000	ng/kg or ng/L		
	Colour, turbidity and sediment	nd	–	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	Instr. No. 880-71
	Formaldehyde	0.100	mg/L	2 % HOAc + 2 % NaCl	EAEU

V. A. 6. 6. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware made of wood and other natural materials					
Material	**Type of products**	**Parameter**	**Limit**	**Units**	**Method**
Wood and other natural materials	Specific migration	Formaldehyde	nd	mg/L	EAEU[200]
	Metal migration	As			
		B			
		Cd			
		Pb			

198 Cork stoppers and articles processed by one or several corks or accumulating granulated cork (see definitions in Annex III).
199 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16".
200 Use the appropriate Eurasian Economic Union method according to the "CU TR 007/2011 on safety products intended for children and teenagers".

V. A. 6. 7. ADDITIONAL CONSIDERATIONS

If the article has an organic coating or a synthetic resin used as a glue, please refer to section V. A. 7 of this Standard.

Articles made of natural materials different from wood and/or cork:

If the article does not have any coating and is made of a natural material different from wood and cork (such as slate, marble or mother of pearl), it must comply with the requirements mentioned in the section V. A. 3 of this Standard.

V. A. 6. 8. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Resolution ResAP (2004) 2 on cork stoppers and other cork materials and articles intended to come into contact with foodstuffs.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **French regulation:**

– Note d'information n°2012-93.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 31. Test standard DIN 10955.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1 -2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 19790.1-2005 Disposable chopsticks - Part 1: Wooden chopsticks.

– GB 19790.2-2005 Disposable chopsticks - Part 2: Bamboo chopsticks.

– SN/T 2278-2009 Food contact materials - Determination of pentachlorophenol in woody materials - GC/MS method.

– SN/T 2204-2008 "Food contact materials - Wood materials - Determination of pentachlorophenol in food simulants - GC/MS method".

– GB/T 23778- 2009 Cylindrical cork stoppers for alcohol and food packaging.

– SN/T 2595- 2010 Rules for inspection of food contact materials - Cork, wood and bamboo articles.

• **Korean regulation:**

– "Korean Standards and Specifications for Utensils, Containers and Packages" 2019.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **Colombian regulation:**

– Res. Nº 000683 (2012): *"Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption"*.

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: *"General criteria for containers and equipment intended to come into contact with foodstuffs*".

• **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 005/2011 on safety of packaging.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. A. 6. 9. SUMMARY

Test Item		Natural Wood	Cork stoppers	Other cork articles
Metal Content	As	Absent[201]	–	–
	Cd	0.5 mg/kg wood	–	–
	Hg	0.3 mg/kg wood	–	–
	Pb	3 mg/kg wood	–	–
Metal Migration	As	0.01 mg/kg	0.01 mg/kg	0.01 mg/kg
	B	1 mg/kg	1 mg/kg	1 mg/kg
	Cr	0.1 mg/kg	0.1 mg/kg	0.1 mg/kg
	Cu	5 mg/kg	5 mg/kg	5 mg/kg
	Mn	0.5 mg/kg	–	–
	Pb	1 mg/L	–	–
Sensory Test		≤ 2.5 / ≤ 1	≤ 2.5 / ≤ 1	≤ 2.5 / ≤ 1
Coliform		nd	–	nd
Pathogenic bacteria		nd	–	nd
Mould		50 cfu/g	–	50 cfu/g
Total number of colonies		–	1.00 cfu/piece	–
Mycete		–	5.00 cfu/piece	–
Yeast		–	1.00 cfu/piece	–
Formaldehyde		3.0 mg/kg food; 0.1 mg/L	0.100 mg/L	0.100 mg/L
Pentachlorophenol residues		0.10 mg/kg[202]	0.15 mg/kg	0.15 mg/kg
Pentachlorophenol migration		150 ng/kg	150 ng/kg or ng/L	150 ng/kg or ng/L
Polychlorinated biphenyls (PCB)		2 mg/kg	–	–
Trichlorophenol migration		2000 ng/kg or ng/L	2000 ng/kg or ng/L	2000 ng/kg or ng/L
Sulphur dioxide		12.8 mg/L	–	600 mg/kg
Thiabendazole		1.8 mg/L[203]	–	–
Ortho-phenylphenol		7.3 mg/L[203]	–	–
Biphenyl		0.9 mg/L[203]	–	–
Imazalil		0.6 mg/L[203]	–	–
Soaking test		–	No granulated cork is separated from the polymer	–
Residual oxidant		–	0.20 mg/piece	–
Colour migration		nd	nd	nd
Turbidity and sediment		nd	–	nd

201 LOD = 2 mg/kg.
202 Limit for bamboo articles: 0.15 mg/kg
203 The requirements for disposable bamboo chopsticks are the following:
– Limit: 10 mg/kg.
– Test method: GB 19790.2 Annex B.

V. A. 7. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS WITH ORGANIC COATINGS

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V. A. 7. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS WITH ORGANIC COATINGS

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to organic coatings included in Annex I. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of tableware products with organic coatings. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. A. 7. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier should review the overall migration as specified in the following table according to the specific coating material:

Tableware products intended to be used in contact with all types of foodstuffs[204]				
Material[205]	**Inditex Limits**	**Units**	**Test conditions[206]**	**Method**
CELLULOSE ACETATE BUTYRATE, PERCHLOROVINYL RESIN, PHENOLIC RESIN, PU, SILICONE PAINT and UPR	30	mg/kg	(EN: 10 % EtOH; SK: water)	ENSK–OM[207]
			4 % HOAc	GBSK–OM[207]
		mg/L	n-heptane; 20 % EtOH	SK[208]
	50	mg/kg	Vegetable oil	EN 1186

In the case of ABS / AS, acrylic resins, melamine, PA, PE, PET / PETG, PLA, POM, PP and / or PS coatings, the Supplier should review the overall migration requirements specified in section V. A. 1 of this Standard to ensure compliance.

For other type of coatings contact Inditex Sustainability Department.

V. A. 7. 3. SPECIFIC MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the specific migration of the substances specified in the following table according to the coating material:

Tableware intended to be used in contact with all types of foodstuffs[209]				
Material[210]	**Parameter**	**Limit**	**Test conditions[211]**	**Method**
PHENOLIC RESIN	Formaldehyde	4 mg/L	4 % HOAc	GBSK-Formaldehyde[212]
		0.100 mg/L	2 % HOAc + 2 % NaCl	EAEU[213]
	Acetaldehyde	0.200 mg/L		
	Phenol	0.05 mg/L	2 % HOAc + 2 % NaCl	EAEU[213]
		3 mg/kg	4 % HOAc	GB 31604.46

Continued on next page

204 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.
205 For other coatings not mentioned in this document, contact Inditex Sustainability Department.
206 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
207 See protocol in section V. A. 11.
208 Use the appropriate Korean methods according to the type of coating material. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.
209 Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section 4 of chapter V. A. 10 as reference.
210 In the case of ABS / AS, acrylic, melamine, PA, PE, PET / PETG, PLA, POM, PP and PS coatings, the Supplier should review all the parameters specified in section V. A. 1 of this Standard to ensure compliance. For other coatings not mentioned in this document, contact Inditex Sustainability department.
211 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
212 See protocol in section V. A. 11.
213 Use the appropriate Eurasian Economic Union method according to the “Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.” or or “CU TR 007/2011 on safety products intended for children and teenagers”.

Tableware intended to be used in contact with all types of foodstuffs[209]				
Material[210]	**Parameter**	**Limit**	**Test conditions[211]**	**Method**
PU	Isocyanates[214]	nd (0.01 mg/kg)[215]	10 % EtOH; 4 % HOAc; vegetal oil	EN 13130
	PAA	nd (0.01 mg/kg)	3 % HOAc	EN 13130; analysis by LC-MS/MS
	Peroxide	nd (0.005 %)	–	LFGB[216]
	Ethylene glycol	1.000 mg/L (or 1.000 mg/m^3 [217])	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[213]
	Acetaldehyde	0.200 (or 0.010 mg/ m^3 [217])		
	Formaldehyde	0.100 (or 0.003 mg/ m^3 [217])		
	Ethyl acetate	0.100 (or 0.100 mg/ m^3 [217])		
	Acetone	0.100 (or 0.350 mg/ m^3 [217])		
	Methyl alcohol	0.200 (or 0.500 mg/ m^3 [217])		
	Propyl alcohol	0.100 (or 0.300 mg/ m^3 [217])		
	Isopropyl alcohol	0.100 (or 0.600 mg/ m^3 [217])		
	Benzene	0.010 (or 0.100 mg/ m^3 [217])		
	Toluene	0.500 (or 0.600 mg m^3 [217])		
UPR	Terephthalic acid	7.5 mg/kg	10 % EtOH; 4 % HOAc; vegetal oil	GB 31604.21 or EN 13130-2[218]
	Isophthalic acid	5.0 mg/kg		GB 31604.1 or EN 13130[218]
	Methacrylic acid	6.0 mg/kg		GB 31604.29 or EN 13130[218]
	VOM	25 mg/dm^2	–	LFGB
	Peroxides	nd	–	LFGB

214 2,6-toluene diisocyanate (2,6 TDI); 2,4-toluene diisocyanate (2,4 TDI); diphenylmethane-4,4′-diisocyanate (MDI); hexamethylene diisocyanate (HMDI); cyclohexyl isocyanate; 1,5-naphthalene diisocyanate; diphenylmethane-2,4′-diisocyanate; 2,4-toluene diisocyanate dimer; Isophorone diisoyanate (IPDI); 3,3′-dimethyl-4,4′-diisocyanatobiphenyl; octadecyl isocyanate; diphenylether-4,4′-diisocyanate; dicyclohexylmethane-4,4′- diisocyanate and tetramethylxylene diisocyanate (TMXDI).

215 SML(T) = nd (0.01 mg/kg), expressed as isocyanate moiety. Nonetheless, verification of compliance shall be performed by residual content per food contact surface area (*i.e.* QMA) in case of reaction with food simulant. QMA = 1 mg/kg in final product, expressed as isocyanate moiety. QMA shall be determined following the GB 31604.45 test method.

216 58th Communication on the Testing of Plastics, Bundesgesundheitsblatt 40 (1997) 412.

217 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.

218 For 4 % HOAc use the Chinese method; for 10 % EtOH, vegetable oil and/or other food simulants applicable to a single type of food or specific groups of foods use the European method.

In the case of ABS / AS, acrylic resins, melamine, PA, PE, PET / PETG, PLA, POM, PP and / or PS coatings, the Supplier should review the overall migration requirements specified in section V. A. 1 of this Standard to ensure compliance.

For other type of coatings contact Inditex Sustainability Department.

V. A. 7. 4. RESIDUAL SUBSTANCES

To ensure compliance with Inditex requirements, the Supplier shall review the residual amount of the substances specified in the following table according to the specific plastic material:

Material	Parameter	Limit	Method
UPR	Styrene	≤ 0.2 %	GB 31604.16

V. A. 7. 5. METALS

To ensure compliance with Inditex requirements, the Supplier shall review the metal migration requirements specified in the following tables according to the specific coating material:

Metal Migration				
Material	**Parameter**	**Limits**	**Units**	**Method**
ALL TYPES OF ORGANIC COATINGS[219]	Al	1	mg/kg	GBEN-metals[220] (ICP-MS or ICP-OES analysis)
	B	0.5	mg/kg	
	Ba	1.0	mg/kg	
	Cd	nd (0.005)	mg/kg	
	Co	0.05	mg/kg	
	Cr	0.05	mg/kg	
	Cu	5.00	mg/kg	
	Hg	nd (0.005)	mg/kg	
	Fe	48	mg/kg	
	Mn	0.60	mg/kg	
	Li	0.60	mg/kg	
	Ni	0.02	mg/kg	
	Pb	nd (0.01)	mg/kg	
	Sb	0.04	mg/kg	
	Sn	1.2	mg/kg	
	Zn	5.00	mg/kg	
	Others[221]	0.01	mg/kg	

V. A. 7. 6. POTASSIUM PERMANGANATE –$KMnO_4$– CONSUMPTION

To ensure compliance with Inditex requirements, the Supplier shall review the potassium permanganate consumption as specified in the following table:

Material	Limit	Units	Test conditions	Method
ALL TYPES OF ORGANIC COATINGS[222]	10	mg/kg	Water; 60ºC, 2 h	GB 31604.2

219 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, silicone, ABS, AS, acrylic resin, melamine, PA, PE, PET/PETG, PLA, POM, PP and PS.
220 See protocol in section V. A. 11.
221 As, Ag, Mo, Bi.
222 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, fluorocarbon resin, silicone, ABS, AS, acrylic resin, PA, PE, PET/PETG, PLA, POM, PP and PS.

V. A. 7. 7. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

To ensure compliance with Inditex requirements, the Supplier shall review all the parameters specified in the following table:

Material	Parameter	CAS No	Limit[223] (mg/kg)	Secondary limit (mg/kg)
ALL TYPES OF ORGANIC COATINGS[222]	Benzo(a)pyrene	50-32-8	< 0.2	< 0.2
	Benzo(e)pyrene	192-97-2	< 0.2	< 0.2
	Benzo(a)anthracene	56-55-3	< 0.2	< 0.2
	Benzo(b)fluoranthene	205-99-2	< 0.2	< 0.2
	Benzo(j)fluoranthene	205-82-3	< 0.2	< 0.2
	Benzo(k)fluoranthene	207-08-9	< 0.2	< 0.2
	Chrysene	218-01-9	< 0.2	< 0.2
	Dibenzo(a,h)anthracene	53-70-3	< 0.2	< 0.2
	Benzo(ghi)perylene	191-24-2	< 0.2	< 0.2
	Indeno (1,2,3-cd)pyrene	193-39-5	< 0.2	< 0.2
	Phenanthrene	85-01-8	< 1 Sum	< 5 Sum
	Pyrene	129-00-0		
	Anthracene	120-12-7		
	Fluoranthene	206-44-0		
	Naphthalene	91-20-3	< 1	< 2
	Sum of 15 PAH	–	< 1	< 5

V. A. 7. 8. PRIMARY AROMATIC AMINES

To ensure compliance with Inditex requirements, the Supplier shall review the primary aromatic amines specific migration as specified in the following table:

Material	Limit	Test conditions[224]	Test Method
ALL TYPES OF ORGANIC COATINGS[225]	nd[226]	3 % HOAc	EN13130-1:2004 and Kunststoffe im lebensmittelverkehr Book Teil B II XXI

223 If the PAHs limits are surpassed but the secondary limits are still met, the confirmation of suitability of the tableware product can be verified by an additional specific migration test of the PAH components according to the EN 13130 test method followed by GC-MS analysis. To comply with Inditex requirements, PAHs shall not be detected in the 1st migration extract (LOD (limit of detection): 0.01 mg/kg (sum of PAHs). If applicable, the PAHs specific migration shall be determined using the following test conditions:
Food simulants: Tableware products intended to come into contact with all types of food stuffs shall be analyzed in 10 % EtOH, 3 % HOAc and vegetal oil. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.
Contact time and temperature: See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

224 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.

225 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, fluorocarbon resin, silicone, ABS, AS, acrylic resin, PA, PE, PET/PETG, PLA, POM, PP and PS.

226 LOD (limit of detection): 0.01 mg/kg (sum of PAA).

V. A. 7. 9. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
ALL TYPES OF ORGANIC COATINGS[225]	≤ 2.5[227]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

V. A. 7. 10. COLOR MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall perform the colour migration test as specified in the following table:

Material	Parameter	Limit	Test Method
ALL TYPES OF ORGANIC COATINGS[225]	Color	No detection	Instr. No. 880-71
	Turbidity and sediment		

V. A. 7. 11. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware with organic coatings[209]					
Material[210]	Parameter	Limit	Units	Test conditions[212]	Method
PHENOLIC RESIN	Formaldehyde	nd	mg/L	2 % HOAc + 2 % NaCl	EAEU[228]
PU	Benzene	nd	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	
	Methyl alcohol				
	Ethyl acetate				
	Formaldehyde			2 % HOAc + 2 % NaCl	

V. A. 7. 12. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 10/2011 of 14th January 2011 on plastic materials and articles intended to become into contact with food and its amendments.

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Partial Agreement in the Social and Public Health Field 2004 "Coatings intended to come into contact with foodstuffs".

227 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

228 Use the appropriate Eurasian Economic Union method according to the "CU TR 007/2011 on safety products intended for children and teenagers".

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

– BfR XII. Unsaturated Polyester Resins.

– BfR XXXIX. Commodities Based on Polyurethanes.

- **French regulation:**

– Décret 92-631.

– Décret 2007-766.

– Recommandation DGCCRF 2004-64 and its amendment DM/4B/COM/001.

- **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.10-2016 National Food Safety Standard for Paint and Coating Intended to Come into Contact with Food.

– GB 9685-2016 National Food Safety Standard for Uses of Additives in Food Contact Materials and Their Products.

- **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

- **USA regulation:**

– 21 CFR 175.300 “Resinous and polymeric coatings”.

- **Korean regulation:**

– “Korean Standards and Specifications for Utensils, Containers and Packages” 2019.

- **Taiwanese regulation:**

– Act Governing Food Sanitation.

– "Sanitation Standards for Food Utensils, Containers and Packages" and its amendments.

• **Colombian regulation:**

– Res. Nº 000683 (2012): *"Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption"*.

– Res. Nº 0004143 (2012): *"Technical regulation on sanitary requirements for plastic and elastomeric materials, objects, containers and equipment and their additives, intended to come into contact with foodstuffs and beverages for human consumption"*.

• **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: *"General criteria for containers and equipment intended to come into contact with foodstuffs"*.

– MERCOSUR/GMC/RES. Nº 56/92: *"General provisions for containers and equipment made of plastic intended to come into contact with foodstuffs"*.

– MERCOSUR/GMC/RES. Nº 02/12: *"Positive list for monomers and other starting substances and polymers permitted in the manufacture of containers and equipment made of plastic intended to come into contact with foodstuffs"*.

– MERCOSUR/GMC/RES. Nº 05/18: *"Positive list for additives permitted in the manufacture of plastic materials and polymeric coatings intended to come into contact with foodstuffs"*.

– MERCOSUR/GMC/RES N° 15/10: *"Permitted colouring agents for containers and equipment made of plastic intended to come into contact with foodstuffs"*.

• **Israeli regulation:**

– SI 5113 Plastic materials and plastic articles in contact with food and beverages.

• **GCC regulation:**

– GSO 2231:2012 on "General Requirements for the materials and articles intended to come into contact with food".

– GSO 1863:2013 on "Food packages – Part 2: Plastic package – General requirements".

• **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and teenagers.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 " Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. A. 8. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS WITH PORCELAIN ENAMEL AND OTHER INORGANIC COATINGS

V. A. 8. 1. OVERALL MIGRATION 126

V. A. 8. 2. LEAD, CADMIUM & OTHER HEAVY METALS 126

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V. A. 8. 5. APPLICABLE REGULATIONS 129

V. A. 8. 1. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table:

Material	Limit	Units	Test conditions	Method
PORCELAIN ENAMEL	50	mg/kg	Water, 121ºC; 3 autoclave cycles[229]	MERCOSUR/GMC/RES Nº 55/92

V. A. 8. 2. LEAD, CADMIUM & OTHER HEAVY METALS

To ensure compliance with Inditex requirements, the Supplier shall review the migration of heavy metals following the ITX-EN 1388-1/2 test method and shall comply with the migration limits specified in points 1. and 2. of this section.

Test method ITX- EN1388-1/2

Migration method: the method to be used is based on the European standard EN1388-1/2 (test conditions: 4 % acetic acid; 24 h; 22ºC), but according to Inditex requirements three successive extractions must be carried out in the test. Finally, the 1st and 3rd extractions will be analysed:

– For 1st extraction results: metal limits specified in the table shown in part 1 of this section must be considered (Table A and B).

– For 3rd extraction results: metal limits specified in the table shown in part 2 of this of this section must be considered.

Analysis method: all the metals will be analysed by AAS (Atomic Absorption spectrophotometry), ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrophotometry) or ICP-MS (Inductively Coupled Plasma - Mass Spectrometry); except Cr (VI), by diphenylcarbazide colorimetry according to NF T 90-043 or any other equivalent method.

229 Migration extraction step shall be performed in an autoclave following the next cycle: 20 min to reach 100ºC, 10 min at 100ºC, 2 min to reach 121ºC, 30 min at 121ºC, 42 min for cooling down to 80ºC and 10 to 20 min to cool down to room temperature.

1. First migration limits for tableware products with porcelain enamel

Table A. Requirements for tableware products with porcelain enamel						
Material	**Type of Product[230]**		**Parameter**	**Limit**	**Units**	**Method**
PORCELAIN ENAMEL	**Cat.1**	**Flatware** (depth < 25 mm)	Pb	0.8	mg/dm²	ITX-EN 1388-1/2
			Cd	0.07	mg/dm²	
			Sb	0.1	mg/dm²	
			Cr (VI)	0.005	mg/dm²	
			Co	0.1	mg/dm²	
	Cat.2	**Hollowware** (< 3 L) (depth > 25 mm)	Pb	0.8	mg/L	ITX-EN 1388-1/2
			Cd	0.07	mg/L	
			Sb	0.1	mg/L	
			Cr (VI)	0.03	mg/L	
			Co	0.05	mg/L	
	Cat.3	**Hollowware** (> 3 L) (depth > 25 mm)	Pb	0.1	mg/dm²	ITX-EN 1388-1/2
			Cd	0.1	mg/L	
			Sb	0.1	mg/dm²	
			Cr (VI)	0.03	mg/L	
			Co	0.05	mg/L	
	-	**Lip & Rim area** (drinking vessels)	Pb	2.0	mg/article	EN 1388-1/2
			Cd	0.2	mg/article	
			Cr (VI)	0.015	mg/article	
			Co	0.05	mg/L	

Table B. Additional requirements for tableware products with porcelain enamel					
	Type of products	**Parameter**	**Limit**	**Unit**	**Method**
PORCELAIN ENAMEL	All type of tableware products	Al	0.500	mg/L	ITX-EN 1388-1/2
		As	0.050	mg/L	
		B	0.500	mg/L	
		Cr (III) and Cr (VI)	0.100	mg/L	
		Fe	0.300	mg/L	
		Mn	0.100	mg/L	
		Ni	0.100	mg/L	
		Zn	1.000	mg/L	

230 See product type in Annex III and/or in the regulations mentioned in this section.

2. Third migration limits for tableware products with porcelain enamel

Material	Type of Product[231]	Parameter	Limit	Units	Method
PORCELAIN ENAMEL	ALL TYPES OF PRODUCTS	Al	1	mg/L	ITX-EN1388-1/2
		As	nd (0.002)	mg/L	
		B	1	mg/L	
		Ba	1	mg/L	
		Cd	0.01	mg/L	
		Co	0.02	mg/L	
		Cr	0.1	mg/L	
		Cu	4	mg/L	
		Hg	0.005	mg/L	
		Li	0.6	mg/L	
		Mn	0.6	mg/L	
		Ni	0.02	mg/L	
		Pb	0.1	mg/L	
		Sb	0.04	mg/L	
		Se	0.01	mg/L	
		Sr	1	mg/L	
		Rb	1	mg/L	
		Zn	3	mg/L	

231 See product type in Annex III and/or in the regulations mentioned in this section.

V. A. 8. 3. ADDITIONAL REQUIREMENTS FOR CHILDREN'S TABLEWARE

In addition to the requirements specified in the previous sections, to ensure compliance, the Supplier shall review the following requirements for children's tableware products specified in the following table:

Additional requirements for children's tableware with porcelain enamel					
Material	**Type of products**	**Parameter**	**Limit**	**Unit**	**Method**
PORCELAIN ENAMEL	Flatware, small hollowware, cup & mugs	Al	nd	mg/L	ITX-EN 1388-1/2
		As			
		Ba			
		B			
		Cd			
		Co			
		Li			
		Pb			
		Sb			

V. A. 8. 4. ADDITIONAL CONSIDERATIONS

In case the surface in contact with food is modified by treatment with a metallic coating, the Supplier must review all the parameters specified in section V. A. 4 of this Standard to ensure compliance.

V. A. 8. 5. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Council Directive of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs (84/500/EEC) and its amendment (2005/31/EC).

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

- **French regulation:**

– Décret 92-631.

– Décret 2007-766.

– Recommandation DGCCRF 2004-64 and its amendment DM/4B/COM/002.

- **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

– Ministerial Decree of 4 April 1985.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regu-

lation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.3-2016 National Food Safety Standard for Enamelware.

- **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

- **USA regulation:**

– CPG 7117.06 leaching of Cadmium.

– CPG 7117.07 leaching of Lead.

– ASTM C927-1980 (2004) Lead and Cadmium extracted from the lip and rim area of glass tumblers externally decorated with ceramic glass enamels.

- **Canadian Regulation:**

– SOR/2016-175 on “Ceramic and Glassware Regulations”.

- **Korean regulation:**

– “Korean Standards and Specifications for Utensils, Containers and Packages” 2019.

- **Taiwanese regulation:**

– Act Governing Food Sanitation.

– “Sanitation Standards for Food Utensils, Containers and Packages” and its amendments.

- **Colombian regulation:**

– Res. Nº 000683 (2012): *“Technical Regulation on sanitary requirements for materials, articles, containers and equipment intended to come into contact with foodstuffs and beverages for human consumption”.*

– Res. Nº 000835 (2013): *“Technical Regulation on sanitary requirements for materials, articles, containers and equipment made of glass and ceramic intended to come into contact with foodstuffs and beverages for human consumption”.*

- **MERCOSUR regulation:**

– MERCOSUR/GMC/RES Nº 03/92: *“General criteria for containers and equipment intended to come into contact with foodstuffs”.*

– MERCOSUR/GMC/RES Nº 55/92: *“General provisions for containers and equipment made of glass and ceramic intended to come into contact with foodstuffs”.*

• **Mexican Regulation:**

– PROY–NOM–231–SSA1–2016: *"Articles made of glazed pottery, glazed ceramic, porcelain and glass. Maximum allowable limits for soluble lead and cadmium. Test Method."*

• **Israeli regulation:**

– SI 1003 Release of lead and cadmium from ware in contact with food.

• **GCC regulation:**

– GSO 2231:2012 on "General Requirements for the materials and articles intended to come into contact with food".

– GSO ISO 6486-2 (2013): Ceramic ware, glass-ceramic ware and glass dinnerware in contact with food –Release of lead and cadmium– Part 2: Permissible limits.

– GSO ISO 7086-2 (2013): Glass hollowware in contact with food —Release of lead and cadmium— Part 2: Permissible limits.

• **Eurasian Economic Union:**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 007/2011 on safety products intended for children and teenagers.

V. A. 9. PRODUCT HEALTH REQUIREMENTS FOR TABLEWARE PRODUCTS MADE OF TEXTILE

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V. A. 9. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF TABLEWARE PRODUCTS MADE OF TEXTILE

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to textile products included in Annex I of this Standard. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of tableware products made of textile. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. A. 9. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table:

Tableware products intended to be used in contact with all types of foodstuffs[232]				
Material	**Limit**	**Units**	**Test conditions[233]**	**Method**
ALL TYPES OF TEXTILE FIBRES	60	mg/kg	10 % EtOH; 3 % HOAc; and vegetal oil	EN 1186

V. A. 9. 3. METALS

To ensure compliance with Inditex requirements, the Supplier shall review the metal migration requirements specified in the following table:

Tableware products intended to be used in contact with all types of foodstuffs[234]					
Material	**Parameter**		**Limit (mg/kg)**	**Test conditions[235]**	**Method**
ALL TYPES OF TEXTILE FIBRES	**Metal migration**	Pb	0.01	3 % HOAc	EN 13130 (ICP-MS or ICP-OES analysis)
		Cd	0.005		
		Ni	0.02		
		Cr	0.05		
		Hg	0.005		
		As	0.01		
		B	1		
		F	1		
		Li	0.6		
		Mn	3		
		Sb	0.04		
		Ba	1		
		Se	0.01		
		Cu	0.5		
		Co	0.02		

232 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference. This requirement does not apply to articles intended to be used only in contact with non-fatty dry foodstuffs.

233 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.

234 Tableware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference. This requirement does not apply to articles intended to be used only in contact with non-fatty dry foodstuffs.

235 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.

V. A. 9. 4. MICROORGANISMS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter	Limit	Units	Method
Textiles made of natural fibres[236]	Coliform	nd	- /50 cm^2	GB 14934
	Salmonella (Pathogenic bacteria)	nd	- /50 cm^2	GB 14934
	Mould	50	cfu/g	GB 4789.15

V. A. 9. 5. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
ALL TYPES OF TEXTILE FIBRES	≤ 2.5[237]	Adimensional	DIN 10955

V. A. 9. 6. FLUORESCENT MATTER

To ensure compliance with Inditex requirements, the Supplier shall review the fluorescent matter as specified in the following table:

Material	Limit	Units	Method
Textiles made of natural fibres[238]	Grade 5[239]	Adimensional	EN 648:2006

V. A. 9. 7. OTHER REGULATED SUBSTANCES AND PARAMETERS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter	Limit	Test conditions[240]	Method
ALL TYPES OF TEXTILES	**Formaldehyde**	15 mg/kg	3 % HOAc	EN13130-23
	Alkyl (C8-C18) sulfates	30 mg/kg	10 % EtOH; 3 % HOAc; and vegetal oil	See note[241]
	Mercaptans	nd[242]		EN13130 followed by GC-FID
	Hydroquinone and derivatives (total)	0.01 mg/kg		EN13130 followed by HPLC-FLD
	Triethanolamine	0.01 mg/kg		EN13130 followed by HPLC- MS/MS
	Sodium-2-mercaptobenzothiazole	nd[242]		
	Colour migration test[243]	nd	–	EN 646
	AZO dyestuff content	nd[244]	–	EN 14362-1 and EN 14362-3

Continued on next page

236 See definition in Annex III.
237 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation
238 See definition in Annex III.
239 Scale: grade 1: 125 mg/L; grade 2: 31 mg/l; grade 3: 8 mg/L; grade 4: 3 mg/L and grade 5: nd.
240 See technical guidelines for compliance testing in section V. A. 10 for selecting the appropriate time and temperature test conditions according to the relevant product type.
241 Section 5.3.4 of Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation.
242 LOD = 0.05 mg/kg
243 This requirement is not applicable to textile intended to become in contact with dry, non-fatty foodstuffs.
244 Azo dyes must not be used in the manufacture of food-contact textiles. Azo dyes are capable of decomposing into one or more aromatic amines. (nd: 30 mg/kg).

Material	Parameter	Limit	Test conditions[240]	Method
TEXTILES MADE OF NATURAL FIBRES[238]	Antimicrobial agents	nd	–	EN 1104

V. A. 9. 8. ADDITIONAL CONSIDERATIONS

All food contact products within the scope of this chapter shall also comply with the parameters applicable to 'home textiles' enclosed in the Inditex Standard 'Clear to Wear'.

In case the article is made of synthetic fibres it shall be also compliant with the requirements established in sections V. A. 1. 5, V. A. 1. 6, V. A. 1. 7, V. A. 1. 8, V. A. 1. 9, V. A. 1. 11 of this Standard. Demonstration of compliance shall be performed using the test conditions that represent the worst foreseeable conditions of use for textile products according to the provisions established in section V. A. 10 of this Standard.

V. A. 9. 9. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 10/2011 of 14th January 2011 on plastic materials and articles intended to become into contact with food and its amendments.

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Directive 2007/42/EC of 27th June 2007 relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs and its amendments.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Finnish regulation:**

– Decree of the Ministry of Trade and Industry 268/1992 on heavy metals migrating from food contact articles.

- **USA regulation:**

– 21 CFR 177.2800 "Textiles and textiles fibres".

V. A. 9. 10. SUMMARY

The following is a comprehensive summary of the parameters previously discussed. It is included to provide a general picture of the global requirements.

Parameters	Type of materials & Inditex Limits		
	Textiles made of natural fibres	Textiles made of synthetic fibres	Textiles made of arificial fibres
OM	60 mg/kg	60 mg/kg	60 mg/kg

Continued on next page

Parameters		Type of materials & Inditex Limits		
		Textiles made of natural fibres	Textiles made of synthetic fibres	Textiles made of arificial fibres
Metals migration (mg/kg)	Pb	0.01	0.01	0.01
	Cd	0.005	0.005	0.005
	Ni	0.02	0.02	0.02
	Cr	0.05	0.05	0.05
	Hg	0.005	0.005	0.005
	As	0.01	0.01	0.01
	B	1	1	1
	F	1	1	1
	Li	0.6	0.6	0.6
	Mn	3	3	3
	Sb	0.04	0.04	0.04
	Ba	1	1	1
	Se	0.01	0.01	0.01
	Cu	0.5	0.5	0.5
	Co	0.02	0.02	0.02
	Al	-	1.00	-
	Ge[245]	-	0.1	-
	Fe	-	48	-
	Sn	-	1.2	-
	Zn	-	5	-
	Others[246]	-	0.01	-
Metals content[247] (mg/kg)	Cd	-	nd	-
	Pb	-	nd	-
	Cr[248]	-	10	-
	Hf[248]	-	100	-
	V[248]	-	20	-
	Zr[248]	-	100	-
	Zn[245]	-	80	-
	Sum of Pb, Cd, Cr (VI) and Hg	-	100	-
Microorganisms	Coliform	nd /50 cm^2	-	-
	Salmonella (Pathogenic bacteria)	nd /50 cm^2		
	Mould	50 cfu/g		
Sensory test		≤ 2.5	≤ 2.5	≤ 2.5
Fluorescent matter		Grade 5	-	-
Formaldehyde		15 mg/kg	15 mg/kg	15 mg/kg
Alkyl (C8-C18) sulfates		30 mg/kg	30 mg/kg	30 mg/kg
Mercaptans		nd	nd[249]	nd
Hydroquinone and derivatives (total)		0.01 mg/kg	0.01 mg/kg	0.01 mg/kg

Continued on next page

245 This parameter only applies to PET.
246 Ag, Mo, Bi.
247 For PET articles, besides complying with the metal content limits shown previously, the metal content shall not exceed the following limits: antimony (Sb): 350 mg/kg; gallium (Ga): 20 mg/kg; germanium (Ge): 100 mg/kg; cobalt (Co): 125 mg/kg; lithium (Li): 130 mg/kg; manganese (Mn): 140 mg/kg; titanium (Ti): 120 mg/kg; phosphorous (P): 125 mg/kg.
248 This parameter only applies to PP and PE.
249 LOD = 0.05 mg/kg

Parameters	Type of materials & Inditex Limits		
	Textiles made of natural fibres	Textiles made of synthetic fibres	Textiles made of arificial fibres
Triethanolamine	0.01 mg/kg	0.01 mg/kg	0.01 mg/kg
Sodium-2-mercaptobenzothiazole	nd	nd[249]	nd
Colour migration test[250]	nd	nd	nd
Antimicrobial agents	nd	-	-
PAA[251]	-	nd	-
$KMnO_4$ Consumption[252]	-	10 mg/kg	-
PAHs[253]	-	note[254]	-
Specific Migration	-	note[255]	-
Residual Substances	-	note[256]	-

250 This requirement is not applicable to textile intended to become in contact with dry, non-fatty foodstuffs.
251 Textile made of synthetic fibres shall comply with section V. A. 1. 9 of this Standard.
252 Textile made of synthetic fibres shall comply with section V. A. 1. 6 of this Standard.
253 Textile made of synthetic fibres shall comply with section V. A. 1. 8 of this Standard.
254 PAHs limit: < 0.2 mg/kg (Naphthalene < 1 mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: < 1 mg/kg); Sum of 15 PAH < 1 mg/kg. PAHs secondary limit: < 0.2 mg/kg (Naphthalene < 2 mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: < 5 mg/kg; Sum of 15 PAH < 5 mg/kg).
255 Textile made of synthetic fibres shall comply with the specific migration requirements enclosed in section V. A. 1. 3 according to the relevant plastic material.
256 Textile made of synthetic fibres shall comply with the residual substances requirements enclosed in section V. A. 1. 4 according to the relevant plastic material.

V. A. 10. TECHNICAL GUIDELINES FOR PRODUCT HEALTH REQUIREMENTS COMPLIANCE TESTING OF TABLEWARE PRODUCTS

V. A. 10. 1. INTRODUCTION 139

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V. A. 10. 3. TIME AND TEMPERATURE TEST CONDITIONS ACCORDING TO THE PRODUCT TYPE 139

V. A. 10. 4. SELECTION OF FOOD SIMULANTS ACCORDING TO THE PRODUCT TYPE 142

V. A. 10. 1. INTRODUCTION

This section includes a comprehensive guideline on the applicable testing conditions that are to be taken into account when selecting the suitable migration test to be performed.

Part V. A. 10. 2 of this section encloses a table that illustrates the different types of tableware that are considered in this Standard. This table provides also a non-exhaustive list of types of articles according to the relevant tableware type. In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in V. A. 10. 2, contact Inditex Sustainability Department.

Part V. A. 10. 3 consists of several tables that present, depending on the test method, the relevant time and temperature testing conditions to be selected for each type of tableware product. The proposed testing conditions are based on the foreseeable worst case use of the article (*i.e.* contact time and contact temperature).

Finally, part V. A. 10. 4 provides the guidelines to select the adequate food simulants that the Supplier shall select for the demonstration of compliance depending on the type of product and the type of foodstuffs that are foreseen to become in contact with the tableware.

V. A. 10. 2. PRODUCT TYPE EXAMPLES

Product type	Examples
Tableware for cold and/or ambient use for short term contact	Cutlery utensils such as salad servers; salad tongues; ice tongues; cake slices; cheese knives; cheese slicers; grapefruit knives; tomatoe knives; oyster knives; butter curlers; butter knives; honey dippers; etc. Serveware such as ice bucket; etc. Tablelinen such as tableclothes; placemats; napkins; etc.
Tableware for cold and/or ambient use for long term contact (except food storage)	Serveware such as bread baskets; decanters; butter dishes; etc. Picnicware such as water bottles (or fitness bottles / bicycle bottles); lunchboxes; baby food pouches; etc.
Tableware for cold and/or ambient use for long term contact (including food storage)	Serveware such as sugar bowls; molases, sugar syrups and honey dispensers; oil and vinegar cruets; salt and pepper shakers; etc.
Tableware for cold, ambient and/or hot use for a maximum time of $t = 120/2^{[(T-70)/10]}$ [257]	Cutlery utensils such as table forks; lunch forks; fish forks; dessert forks; serving fork; fish serving fork; steak knives; desert knives; fish slices; table spoons; teaspoons / coffee spoons; mocha spoons; chopsticks; seafood cracker; seafood forks; lobster shellers; serving spoon; soup ladle; gravy ladle; tea infuser; etc. Dinnerware such as dinner plates; soup plates; side plates; dessert plates; pasta bowls; bowls; mugs and cups. Drinkware such as tumblers; stemmed glasses; beer mugs; etc. Serveware such as trays; serving bowls; serving plates and dishes; platters; casserole dishes; serving boards; gravy boats; bottles (not intended for storage); jugs (*e.g.* jugs for beverages, milk jugs, cream jugs, coffee jugs, etc.); pitchers; carafes; tea pots; etc.
Tableware for cold, ambient and/or hot use for long term contact (except food storage)	Picnicware such as thermos flask; isothermic drinking beakers (*e.g.* travel mug); etc.

V. A. 10. 3. TIME AND TEMPERATURE TEST CONDITIONS ACCORDING TO THE PRODUCT TYPE

This section is a comprehensive guideline on the applicable time and temperature test conditions that are to be taken into account when selecting the suitable migration tests to be performed. Please note that if your product can be clustered in more than one product type according to part V. A. 10. 2 of this section, the following provisions may reduce the number of analysis to be performed.

257 'Hot use' means hot fill and/or heating up to a temperature T where 70°C ≤ T ≤ 100°C for a maximum of time of $t = 120/2^{[(T-70)/10]}$ (*i.e.* 2 h (at T=70°C) ≤ t ≤ 15 min (at T=100°C).

(Hot fill means: the filling of any article with a foodstuff at a temperature not exceeding 100°C at the moment of filling, after which the food cools down to 50°C or below within 60 minutes, or to 30°C or below within 150 minutes).

Test conditions to be used in the following test methods: • EN 1186; • EN 13130 and its parts; • Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013 • GB 31604.1, .8, .7, .12, .15, .17, .19, .20, .21, .29, .38, .43, .44, .46, .48 and .49; • SN/T 2204; and • INDITEX protocols' stages based on the aforementioned test methods.		
Product type	**Test conditions**	
	Specific migration	**Overall migration**
Tableware for cold and/or ambient use for short term contact	40ºC, 0.5 h[258]	40ºC, 0.5 h
Tableware for cold and/or ambient use for long term contact (except food storage)	100ºC (or reflux), 2 h[259]	100ºC (or reflux), 2 h[260]
Tableware for cold and/or ambient use for long term contact (including food storage)	100ºC (or reflux), 2 h[261]	100ºC (or reflux), 2 h[260]
Tableware for cold, ambient and/or hot use for a maximum time of $t = 120/2^{[(T-70)/10]}$ [262]	70ºC, 2 h	
Tableware for cold, ambient and/or hot use for long term contact (except food storage)	Hot fill at 100ºC; 24 h[263]	100ºC, 1 h

Test conditions to be used for SK test methods and for INDITEX protocol' stages based on SK test methods						
Product type	**Food simulant**				**Test conditions**	
	Water	**4 % HOAc**	**20 % EtOH**	**n-heptane**	**Specific migration**	**Overall migration**
Tableware for cold and/or ambient use for short term contact Tableware for cold and/or ambient use for long term contact (except food storage)	✓	✓	✓		70ºC, 0.5 h	
Tableware for cold and/or ambient use for long term contact (including food storage) Tableware for cold, ambient and/or hot use for a maximum time of $t = 120/2^{[(T-70)/10]}$				✓	25ºC, 1 h	
Tableware for cold, ambient and/or hot use for long term contact (except food storage)	✓	✓			100ºC, 0.5 h	
			✓		70ºC, 0.5 h	
				✓	25ºC, 1 h	

258 Specific migration from table ware for cold use only (*e.g.* ice tongues, ice buckets, etc.) shall be analysed at 20ºC for 0.5 h.

259 If the specific migration limit is surpassed, the confirmation of suitability of the tableware product shall be verified by an additional overall migration test performed at 40ºC for 24 h.

260 If the overall migration limit is surpassed, the confirmation of suitability of the tableware product shall be verified by additional overall migration test performed at 40ºC for 10 days.

261 If the specific migration limit is surpassed, the confirmation of suitability of the tableware product shall be verified by additional specific migration test performed at 40ºC for 10days or, in case of tableware for long term storage up to 6 months at cold or ambient use (*e.g.* honey dispensers, oil and vinegar cruets, etc.) 50ºC for 10 days.

262 'Hot use' means hot fill and/or heating up to a temperature T where 70ºC ≤ T ≤ 100ºC for a maximum of time of $t = 120/2^{[(T-70)/10]}$ (*i.e.* 2 h (at T=70ºC) ≤ t ≤ 15 min (at T=100ºC).

(Hot fill means: the filling of any article with a food with a temperature not exceeding 100°C at the moment of filling, after which the food cools down to 50°C or below within 60 minutes, or to 30°C or below within 150 minutes).

263 Fill with food simulant at 100ºC and keep container closed for 24 h.

Test conditions to be used for PLA specific migration according to JP 370	
Product type	**Test conditions**
Tableware for cold and/or ambient use for short term contact Tableware for cold and/or ambient use for long term contact (except food storage) Tableware for cold and/or ambient use for long term contact (including food storage) Tableware for cold, ambient and/or hot use for a maximum time of t = $120/2^{[(T-70)/10]}$	Water, 60ºC, 0.5 h
Tableware for cold, ambient and/or hot use for long term contact (except food storage)	Water, 95ºC, 0.5 h

Test conditions to be used for melamine monomer specific migration according to TW test methods and INDITEX protocol' stages based on TW test methods		
Product type	**Food simulant**	**Test conditions**
	4 % HOAc	**Melamine monomer specific migration**
Tableware made of melamine	✓	95ºC, 0.5 h

Test conditions to be used for paper & board overall migration according to TW test methods and INDITEX protocol' stages based on TW test methods				
Product type	**Food simulant**			**Test conditions**
	Water	**4 % HOAc**	**20 % EtOH**	**Overall migration**
Tableware for cold and/or ambient use for short term contact Tableware for cold, ambient and/or hot use for a maximum time of t = $120/2^{[(T-70)/10]}$	✓	✓	✓	60ºC, 0.5 h

Test conditions to be used for paper & board overall migration according to FDA test methods and INDITEX protocol' stages based on FDA test methods					
Product type	**Food simulant**				**Test conditions**
	Water	**8 % EtOH**	**50 % EtOH**	**n-heptane**	**Overall migration**
Tableware for cold and/or ambient use for short term contact	✓	✓	✓		150ºF (*i.e.* 65.6ºC), 2 h
Tableware for cold, ambient and/or hot use for a maximum time of t = $120/2^{[(T-70)/10]}$				✓	100ºF (*i.e.* 37.8ºC), 0.5 h

Test conditions to be used in the EAEU test methods	
Product type	**Test conditions**
	Specific migration
Tableware for cold and/or ambient use for short term contact (< 10 min)	22ºC, 2 h
Tableware for cold and/or ambient use for long term contact (except food storage) (< 2 h)	22ºC, 24 h
Tableware for cold and/or ambient use for long term contact (including food storage)	22ºC, 72 h or 10 days[264]
Tableware for cold, ambient, and/or hot use for a maximum time of 2 h	Hot fill at 80ºC, kept at room temperature during 24 h.
Tableware for cold, ambient, and/or hot use for long term contact (including food storage)	Hot fill at 80ºC, kept at room temperature during 72 h or 10 days[264]

264 73 h: If food storage is up to 2 days; 10 days: if food storage is more than 2 days.

V. A. 10. 4. SELECTION OF FOOD SIMULANTS ACCORDING TO THE PRODUCT TYPE

This part provides the guidelines to select the adequate food simulants to be used for the demonstration of compliance of tableware products. If the article is intended to be used in contact with all types of foods, the Supplier shall follow the specifications established across sections V. A. 1 to V. A. 9 of this Standard. On the other hand, if the article is intended to be used only in contact with a single type of food or specific groups of foods, it shall be tested only in the food simulant(s) that correspond to the relevant food category that is foreseen to be brought in contact with the article.

Point 1 of this part encloses a table that illustrates a non exhaustive list of types of tableware products intended to be used only in contact with specific types of foodstuffs and some examples of these type of products. In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

Points 2 to 7 of this part include several tables that assign the adequate food simulant and test method for the relevant product type, depending on the type of foodstuff that is foreseeable to become in contact with the tableware product.

1. Tableware products intended to be used in contact with a single type of food or specific groups of foods: examples

Product type	Examples
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Sugar bowls; salt and pepper shakers; etc.
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Bread baskets; butter dishes; butter knives; butter curlers; cheese knives; cheese slicers; oil cruets;
Tableware intended only to be brought in contact with aqueous foodstuffs	Water bottles (or fitness bottles / bicycle bottles); ice tongues; ice buckets; molases, sugar syrups and honey dispensers; honey dippers; etc.
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	Tea infuser; coffee and tea jugs; tea pots
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	Decanters and wine accessories.
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	Grapefruit knives; tomatoe knives
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	Milk and cream jugs
Tableware intended only to remove the shell of fresh crustaceans and mollusks (including oysters)	Oyster knives

2. Tableware products made of plastic: food simulants assignment

OVERALL MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[265]	**Limit**	**Food simulant**	**Test method**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	30 mg/L	Water	SK[266]
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	50 mg/kg	Vegetal oil	EN 1186
	30 or 240 mg/L[267]	n-heptane	SK[266]
Tableware intended only to be brought in contact with aqueous foodstuffs	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	30 mg/kg	20 % EtOH	ENSK-OM
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	30 mg/kg	20 % EtOH	ENSK-OM
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM
	30 mg/kg	4 % HOAc	GBSK-OM
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	30 mg/kg	50 % EtOH	ENSK-OM

SPECIFIC MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods		
Product type[265]	**Food simulant**[268]	**Food simulant for EAEU methods**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Simulants specified in the section IV. A	
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	Vegetal oil (or 2 % HOAc for styrene derivatives materials)
Tableware intended only to be brought in contact with aqueous foodstuffs	10 % EtOH	Water
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	20 % EtOH	1 % HOAc (or 0.5 % citric acid for styrene derivatives materials)
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	20 % EtOH	20 % EtOH; 2 % citric acid (or 0.5 % citric acid for styrene derivatives materials)
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid (or 0.5 % citric acid for styrene derivatives materials)
	4 % HOAc	
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	50 % EtOH	3 % lactic acid (or 0.3 % lactic acid for styrene derivatives materials)

265 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

266 Use the appropriate Korean methods according to the type of food contact material. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.

267 Acrylic resins, PA, PE, PP, PET, PETG, PLA and POM: 30 mg/L; ABS, AS, PS: 240 mg/L.

268 Food simulants to be used for Chinese and European test methods for specific migration unless otherwise specified in Chapter. Food simulants to be used for the Chinese and European test methods for specific migration, and INDITEX’ protocol stages based on the aforementioned test methods, unless otherwise specified in Chapter V. A In case the specific migration has to be determined using a South Korean or Japanese test method, the specific migration shall be determined only in the food simulant(s) specified in Chapter V. A.

3. Tableware products made of rubber and silicon rubber: food simulants assignment

OVERALL MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[269]	**Limit**	**Food simulant[270]**	**Test method**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	60 mg/L	Water	SK[271]
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	50 mg/L	Vegetal oil	EN 1186
	60 mg/L	50 % EtOH	GB 4806.11
Tableware intended only to be brought in contact with aqueous foodstuffs	50 mg/L	10 % EtOH	GB 4806.11
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	50 mg/L	20 % EtOH	EN 1186
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	50 mg/L	10 % EtOH	EN 1186
		4 % HOAc	GB 4806.11
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	50 mg/L	50 % EtOH	GB 4806.11

SPECIFIC MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods		
Product type[272]	**Rubber (Nitrosamine and nitrostable substances)**	**Silicone Rubber**
	Food simulant	
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable	Simulants specified in the section IV. A
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	
Tableware intended only to be brought in contact with aqueous foodstuffs	10 % EtOH	Water
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	20 % EtOH	1 % HOAc
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	20 % EtOH	20 % EtOH
		2 % citric acid
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid
	3 % HOAc	
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	50 % EtOH	0.3 % or 3 % lactic acid

269 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

270 Food simulants to be used for Chinese and European test methods for specific migration unless otherwise specified in Chapter. Food simulants to be used for the Chinese and European test methods for specific migration, and INDITEX' protocol stages based on the aforementioned test methods, unless otherwise specified in Chapter V.A. In case the specific migration has to be determined using a South Korean or Japanese test method, the specific migration shall be determined only in the food simulant(s) specified in Chapter V.A.

271 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".

272 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

PAHs and PAA SPECIFIC MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods
Follow the specifications stablished for the selection of food simulants for specific migration for plastic materials and articles.

4. Tableware products made of metals and alloys: food simulants assignment

Tableware products made of metals and alloys			
Product type[273]	Food simulant		
	Overall migration[274]	Heavy metals migration	
		EU method[275]	EAEU method [276]
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable	Not applicable	Not applicable
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	Artificial tap water	Vegetal oil
Tableware intended only to be brought in contact with aqueous foodstuffs	10 % EtOH	Artificial tap water	Water
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	20 % EtOH	Artificial tap water	1 % HOAc
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	Citric acid 5 g/L	2 % citric acid
	3 % HOAc		
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	50 % EtOH	Artificial tap water	0.3 % or 3 % lactic acid
Tableware intended only to remove the shell of fresh crustaceans and molluscs (including oysters)	20 % EtOH		2 % HOAc + 2 % NaCl

5. Tableware products made of natural wood and/or cork: food simulants assignment

SPECIFIC MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods		
Product type[277]	Food simulant[278]	Food simulant for EAEU methods
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable	
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	Vegetal oil
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	10 % EtOH	1 % HOAc
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	20 % EtOH	20 % EtOH; 2 % citric acid
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid
	3 % HOAc[279]	
Tableware intended only to be brought in contact with milk products (milk, milk-based drinks, yogurt, cream, sour cream, etc.)	50 % EtOH	3 % lactic acid

273 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.
274 Only applicable to EN 1186 test method.
275 Only applicable to 'Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013' test method.
276 Only applicable Eurasian Economic Union methods according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.".
277 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.
278 Food simulants to be used for Chinese and European test methods: EN 13130-23 and SN/T 2204.
279 3 % HOAc for the European EN 13130 test methods and its parts; 4 % HOAc for the Chinese GB 31604 test methods.

6. Tableware products with organic coatings: food simulants assignment

OVERALL MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[280]	**Limit**	**Food simulant**	**Test method**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	30 mg/L	Water	SK[281]
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	50 mg/kg	Vegetal oil	EN 1186
	30 or 240 mg/L[282]	n-heptane	SK[281]
Tableware intended only to be brought in contact with aqueous foodstuffs	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	30 mg/kg	20 % EtOH	ENSK-OM
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	30 mg/kg	20 % EtOH	ENSK-OM
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM
	30 mg/kg	4 % HOAc	GBSK-OM
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	30 mg/kg	50 % EtOH	ENSK-OM

SPECIFIC MIGRATION: Tableware products intended to be used in contact with a single type of food or specific groups of foods		
Product type[283]	**EU & CN methods**	**EAEU methods**
	Food simulant[284]	**Food simulant**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Simulants specified in the section IV. A. 7	
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	
Tableware intended only to be brought in contact with aqueous foodstuffs	10 % EtOH	Water
Tableware intended only to be brought in contact with infusions, coffee, tea and the like	20 % EtOH	1 % HOAc
Tableware intended only to be brought in contact with alcoholic beverages of an alcoholic lower than 20 % vol.	20 % EtOH	20 % EtOH
		2 % citric acid
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid
	4 % HOAc	
Tableware intended only to be brought in contact with milk products (milk, milk-based drinks, yogurt, cream, sour cream, etc.)	50 % EtOH	0.3 % or 3 % lactic acid

280 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

281 Use the appropriate Korean methods according to the type of food contact material. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.

282 Acrylic resins, PA, PE, PP, PET, PETG, PLA and POM: 30 mg/L; ABS, AS, PS: 240 mg/L.

283 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

284 Food simulants to be used for the Chinese and European test methods for specific migration, and INDITEX’ protocol stages based on the aforementioned test methods, unless otherwise specified in Chapter V.A. In case the specific migration has to be determined using a South Korean or Japanese test method, the specific migration shall be determined only in the food simulant(s) specified in Chapter V.A.

7. Tableware products made of textile

Tableware products made of metals and alloys		
Product type[285]	Food simulant	
	Overall migration	Specific migration
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable	Simulants specified in the section V. A. 9
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	

SPECIFIC MIGRATION (including PAHs and PAA specific migration): Tableware products intended to be used in contact with a single type of food or specific groups of foods
Follow the specifications stablished for the selection of food simulants for specific migration for plastic materials and articles.

285 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

V. A. 11. INDITEX PROTOCOLS FOR COMPLIANCE TESTING OF PRODUCT HEALTH REQUIREMENTS OF TABLEWARE PRODUCTS

V. A. 11. 1. PROTOCOL: ENSK–OM 149

V. A. 11. 2. PROTOCOL: GBSK–OM 1 150

V. A. 11. 3. PROTOCOL: GBEN–OM 151

V. A. 11. 4. PROTOCOL: GBEN–ACETALDEHYDE 152

V. A. 11. 5. PROTOCOL: GBTW–MELAMINE 153

V. A. 11. 6. PROTOCOL: GBSK–FORMALDEHYDE 154

V. A. 11. 7. PROTOCOL: GBEN–METALS 155

V. A. 11. 8. PROTOCOL: FDAGB–OM 157

V. A. 11. 9. PROTOCOL: FDATW–OM 158

V. A. 11. 10. PROTOCOL: MERCOSUR–TW–OM 159

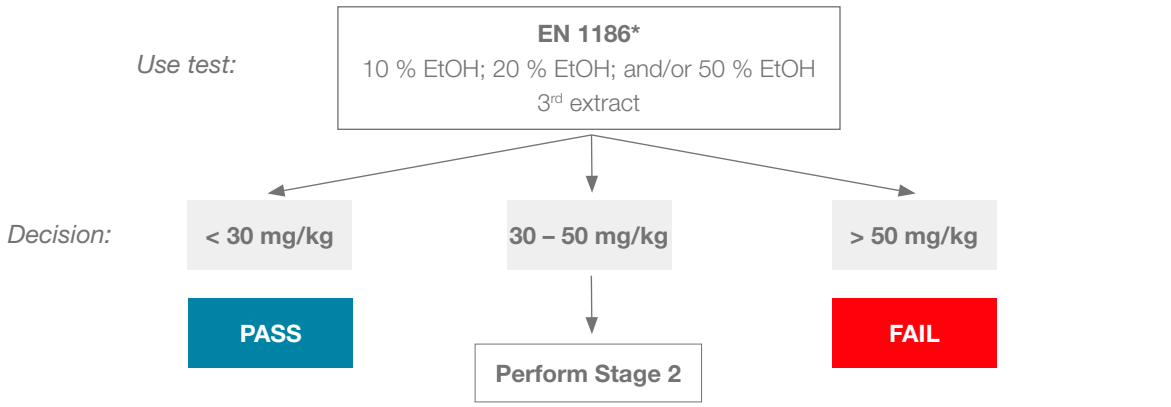
V. A. 11. 11. PROTOCOL: ENCR–FORMALDEHYDE 160

V. A. 11. 1. PROTOCOL: ENSK–OM

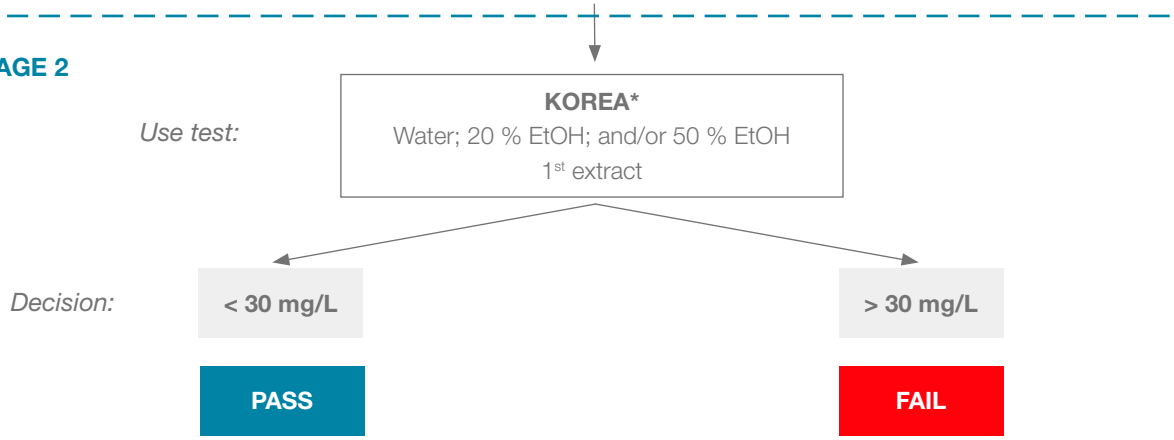
Protocol specified for OM from plastics and organic coatings.

If the article to be tested is a tableware product for cold and ambient use and for short time contact, skip stage 1 and proceed directly with stage 2.

STAGE 1



STAGE 2



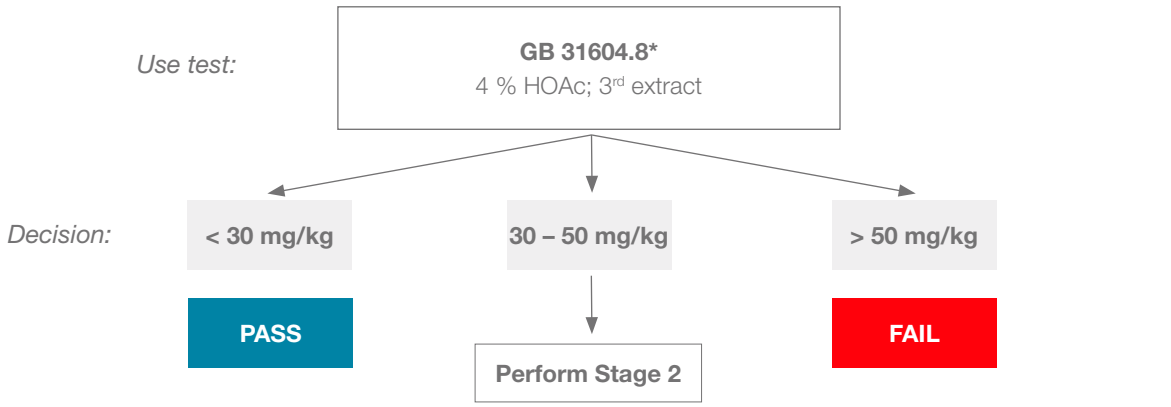
* The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

V. A. 11. 2. PROTOCOL: GBSK–OM 1

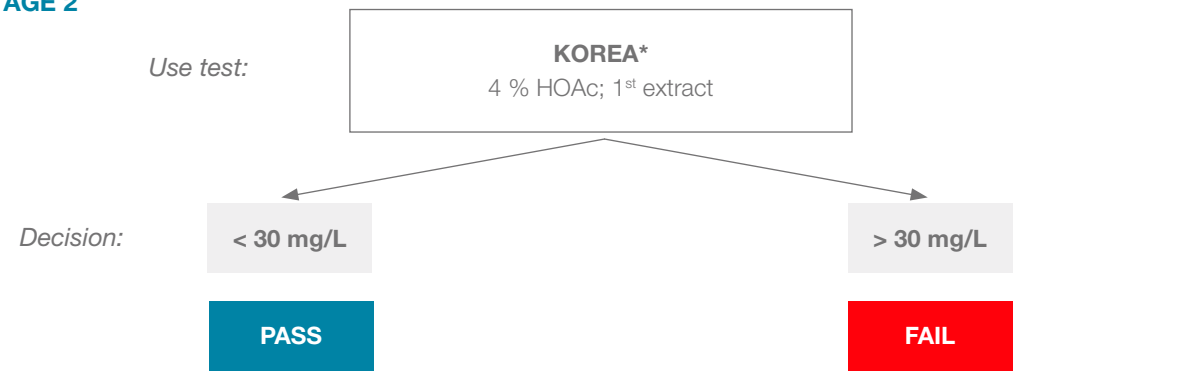
Protocol specified for OM from plastics and organic coatings.

If the article to be tested is a tableware product for cold and ambient use and for short time contact, skip stage 1 and proceed directly with stage 2.

STAGE 1



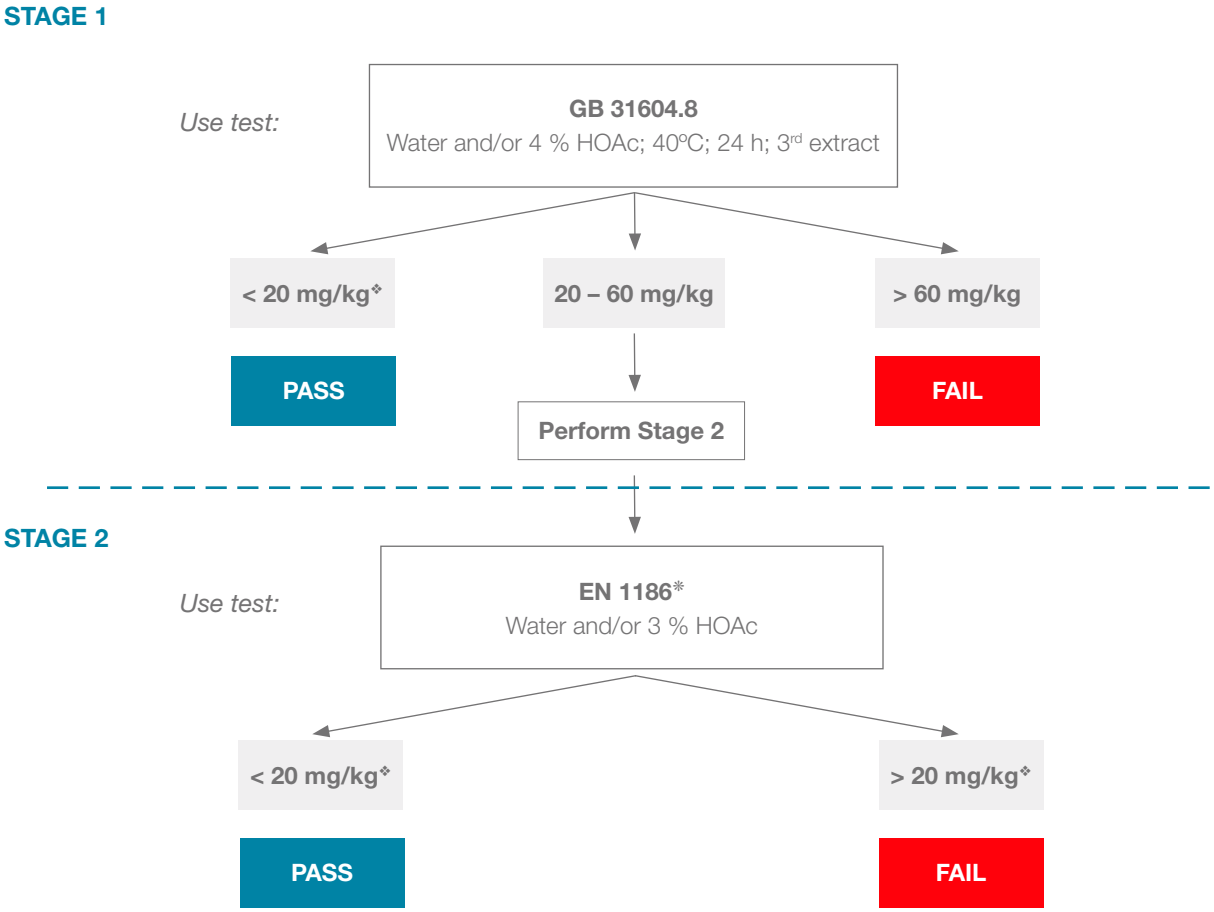
STAGE 2



* The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

V. A. 11. 3. PROTOCOL: GBEN–OM[286]

Protocol specified for OM from rubber-nursing utensils:



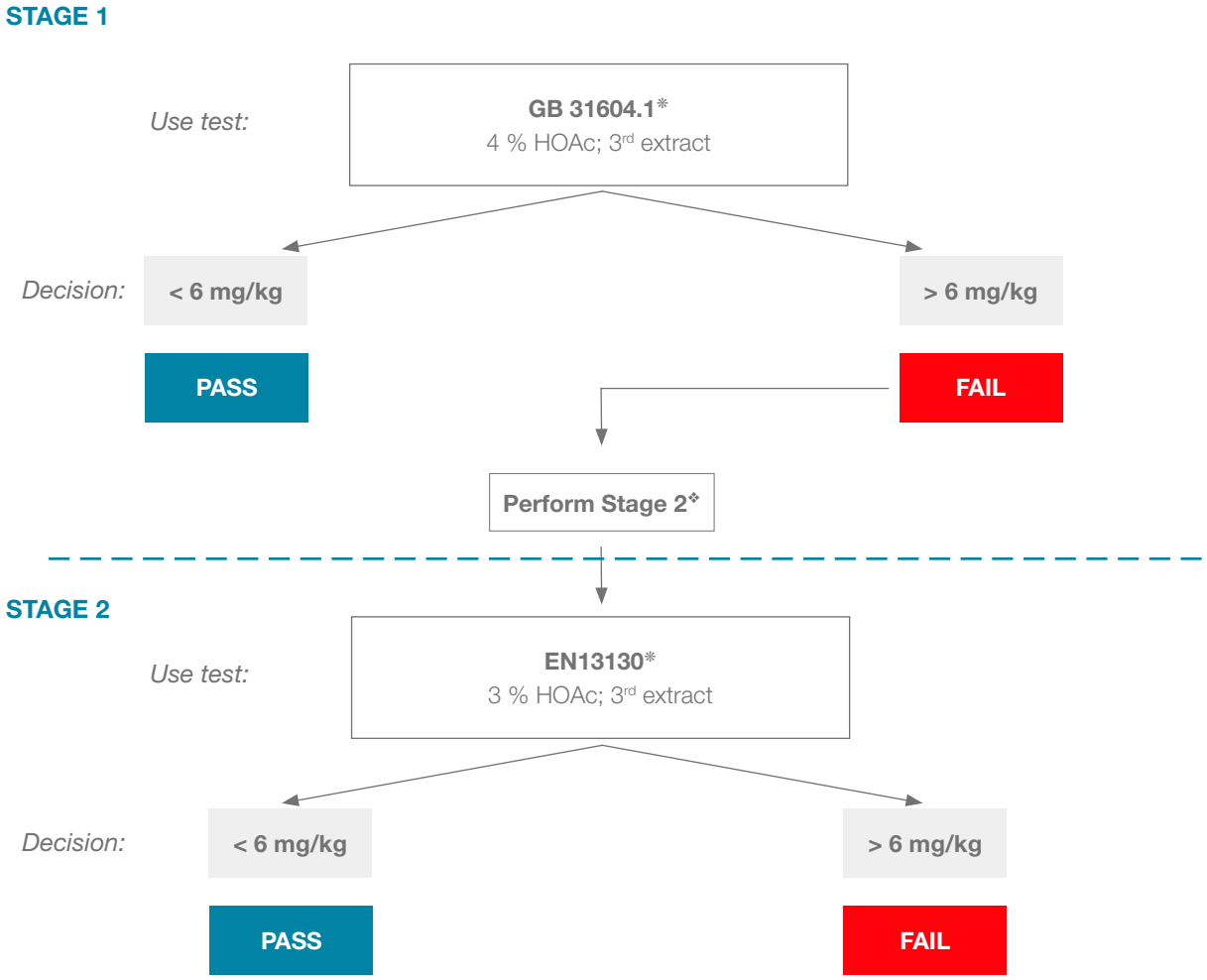
❋ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.* 'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ The migration of ingredients of rubber teats and of the rubber parts of pacifiers must be determined in mg per teat or pacifier.

286 If the sample to be tested is a pacifier, skip stage 1 and proceed directly to stage 2.

V. A. 11. 4. PROTOCOL: GBEN–ACETALDEHYDE

Protocol specified for acetaldehyde SM from PET / PETG in acidic food simulant:

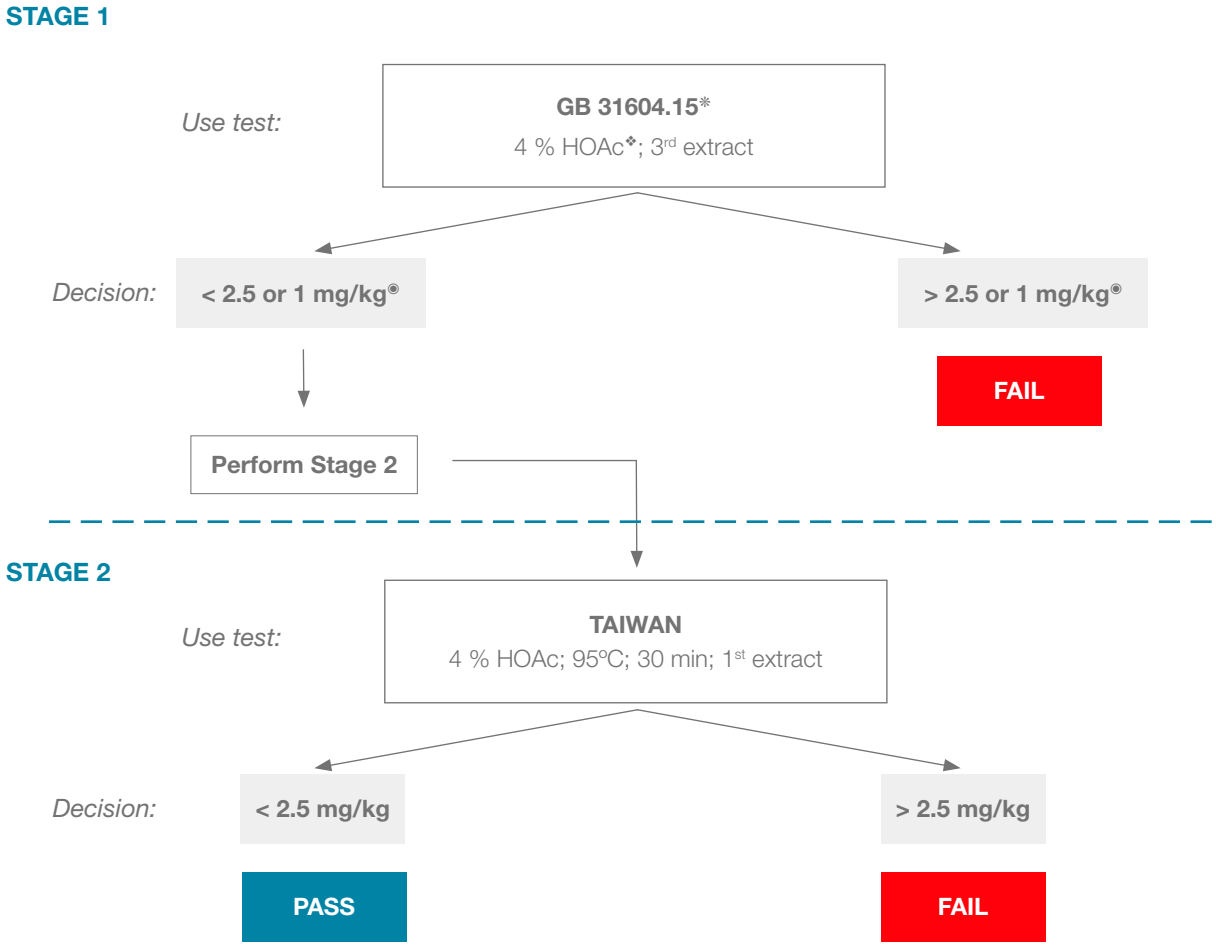


❋ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ If stage 2 is necessary to be performed, contact Inditex Sustainability department.

V. A. 11. 5. PROTOCOL: GBTW–MELAMINE

Protocol specified for melamine monomer SM from melamine:



❋ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

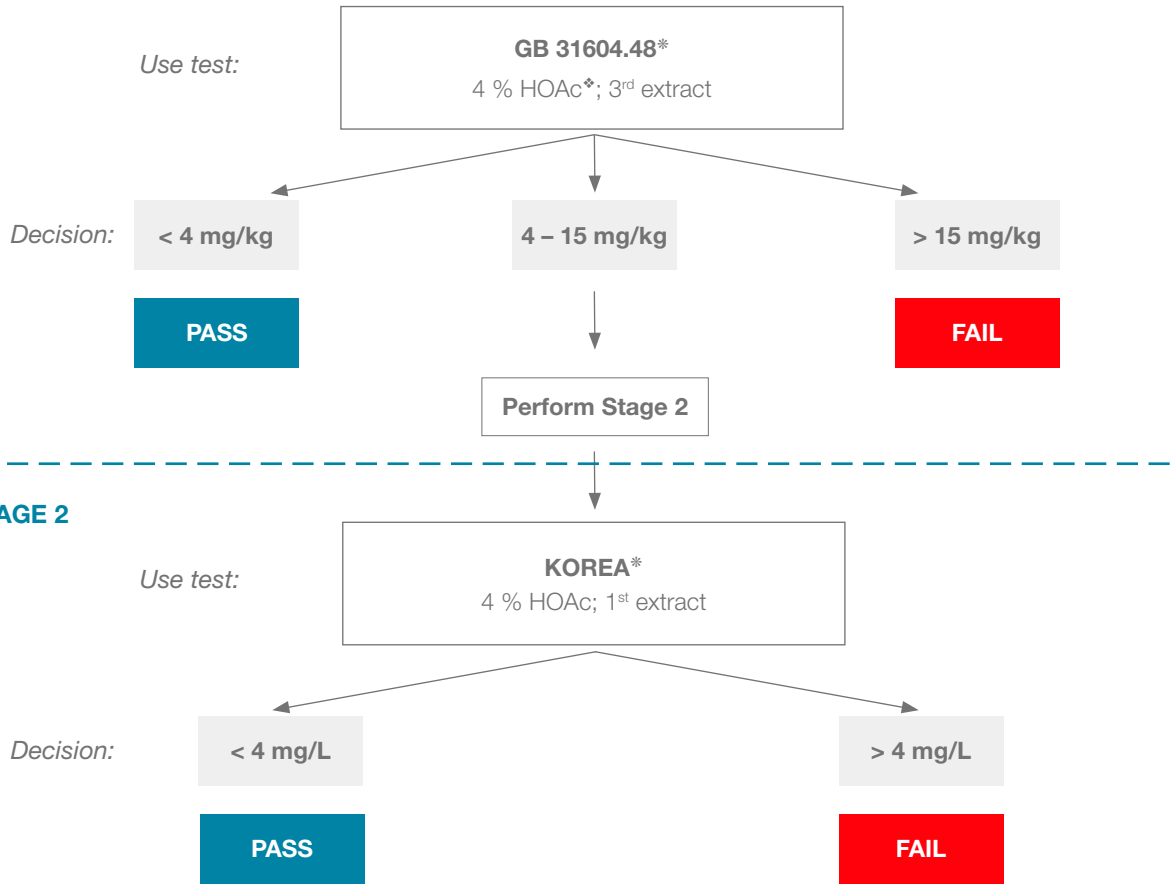
❖ Tableware products intended to come into contact with all types of food stuffs shall be analysed in 4 % HOAc. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

◉ Articles intended to be brought into contact with food intended for infants shall not transfer melamine monomer to food simulants in quantities exceeding 1 mg per kg of food simulant.

V. A. 11. 6. PROTOCOL: GBSK–FORMALDEHYDE

Protocol specified for formaldehyde SM from plastics and organic coatings. If the article to be tested is a tableware for cold and ambient use and for short term contact, skip stage 1 and proceed directly with stage 2.

STAGE 1



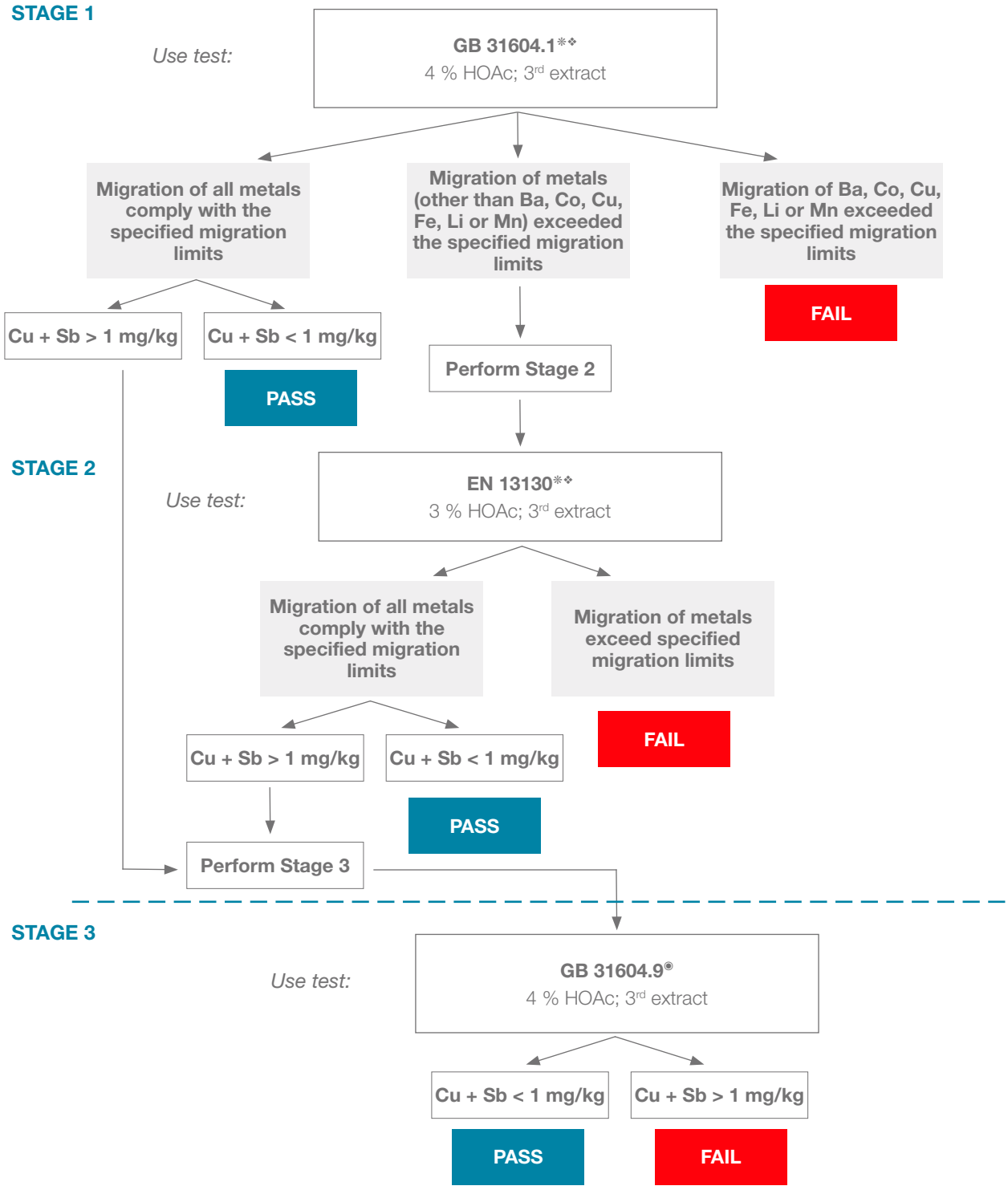
STAGE 2

❋ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ Tableware products intended to come into contact with all types of food stuffs shall be analysed in 4 % HOAc. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. A. 10. 4 as reference.

V. A. 11. 7. PROTOCOL: GBEN–METALS

Protocol specified for metal migration from plastic, rubber, silicon rubber and organic coating materials:



❊ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ Analytical determination of metals is performed by ICP-MS or ICP-OES analysis.

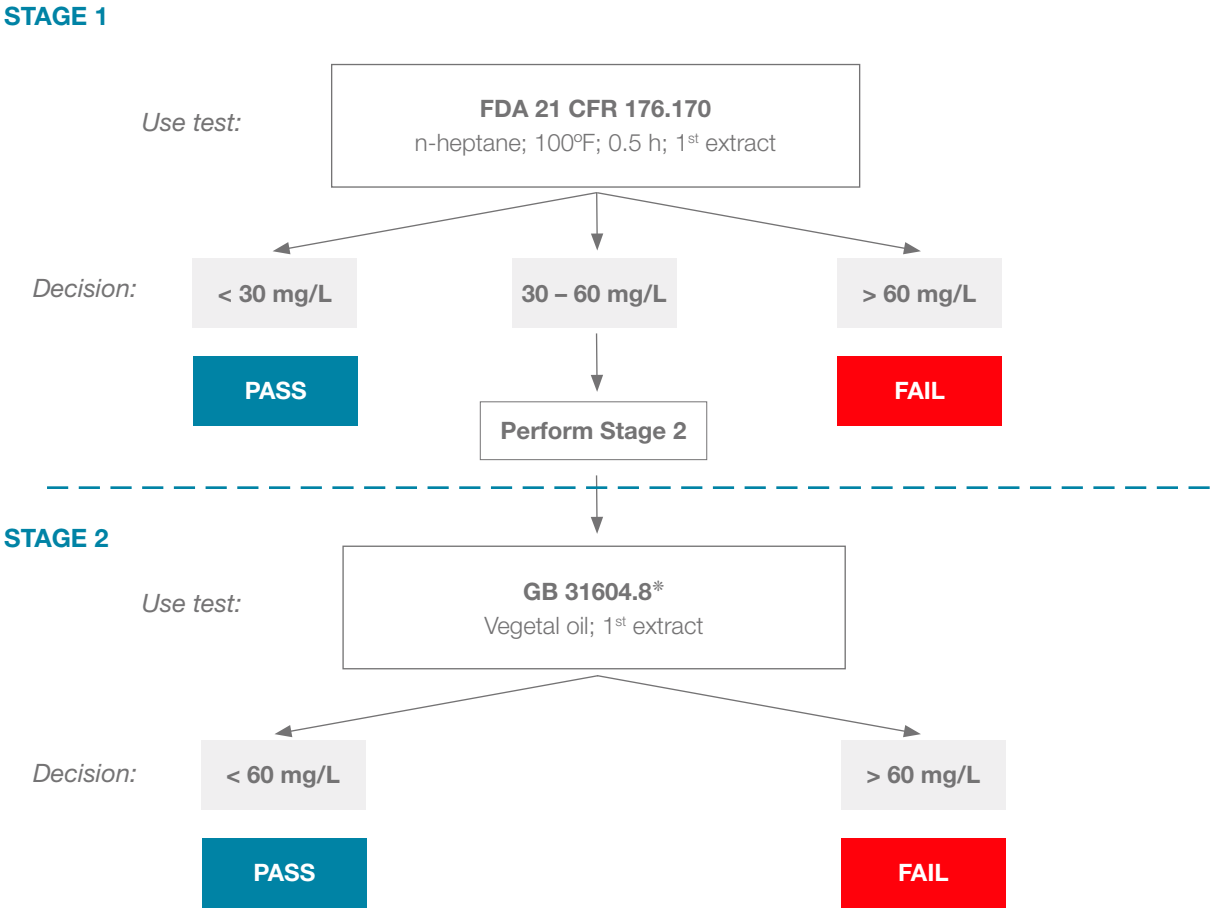
◉ The appropriate time and temperature test conditions to perform the GB 31604.9 test method shall be selected according to the provisions stablished in the following table:

Material	Type of product	Test conditions
PLASTIC	All types of products	60ºC, 2 h
RUBBER	All types of products	60ºC, 0.5 h
SILICON RUBBER	All types of products	60ºC, 0.5 h
ORGANIC COATINGS	Tableware for cold and/or ambient use for short term contact Tableware for cold and/or ambient use for long term contact (except food storage) Tableware for cold and/or ambient use for long term contact (including food storage) Tableware for cold, ambient and/or hot use for a maximum time of $t = 120/2^{[(T-70)/10]}$[287]	60ºC, 2 h
ORGANIC COATINGS	Tableware for cold, ambient and/or hot use for long term contact (except food storage)	100ºC, 0.5 h followed by 24 h at rt

287 'Hot use' means hot fill and/or heating up to a temperature T where 70ºC ≤ T ≤ 100ºC for a maximum of time of $t = 120/2^{[(T-70)/10]}$ (*i.e.* 2 h (at T=70ºC) ≤ t ≤ 15 min (at T=100ºC).
(Hot fill means: the filling of any article with a foodstuff at a temperature not exceeding 100°C at the moment of filling, after which the food cools down to 50ºC or below within 60 minutes, or to 30ºC or below within 150 minutes).

V. A. 11. 8. PROTOCOL: FDAGB–OM

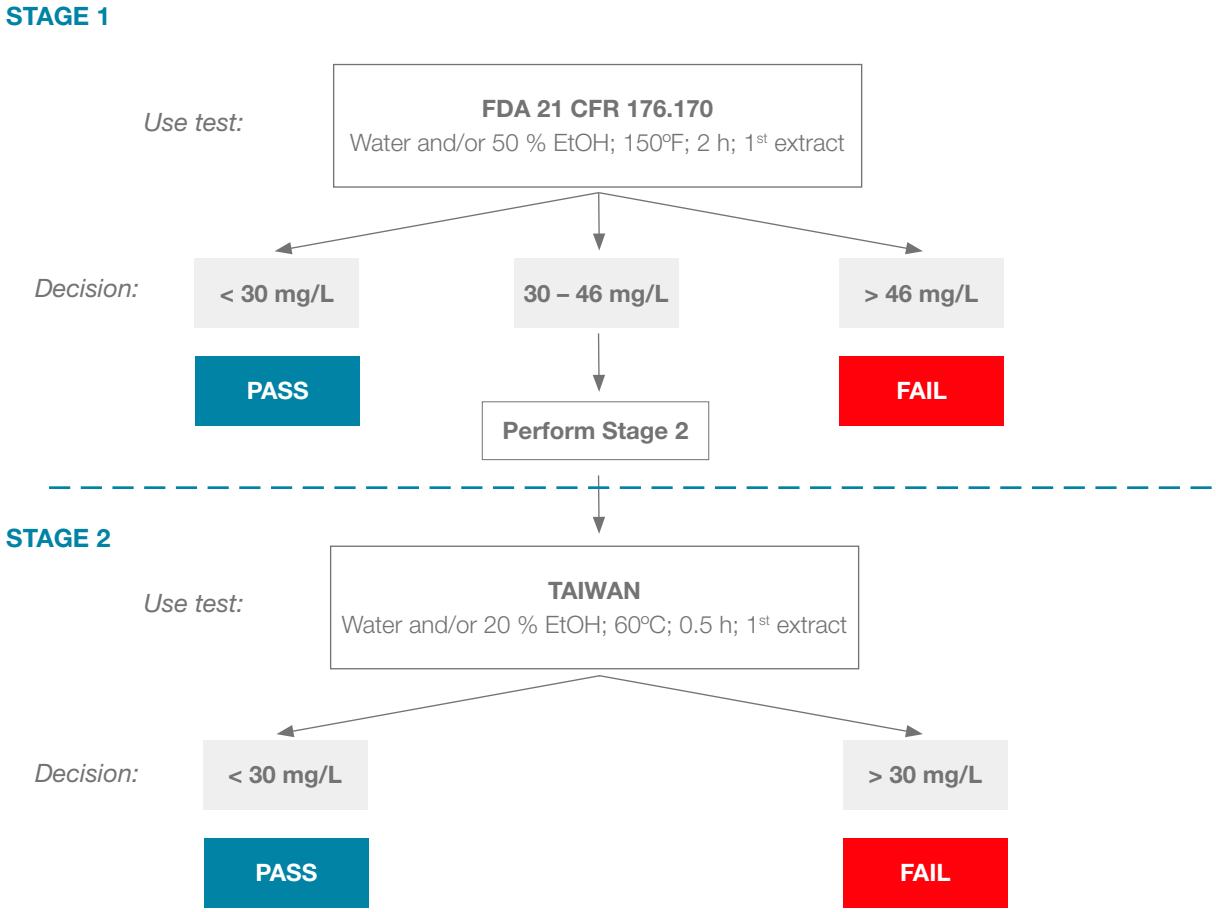
Protocol specified for OM from paper & board in fatty food simulant:



⁕ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

V. A. 11. 9. PROTOCOL: FDATW–OM

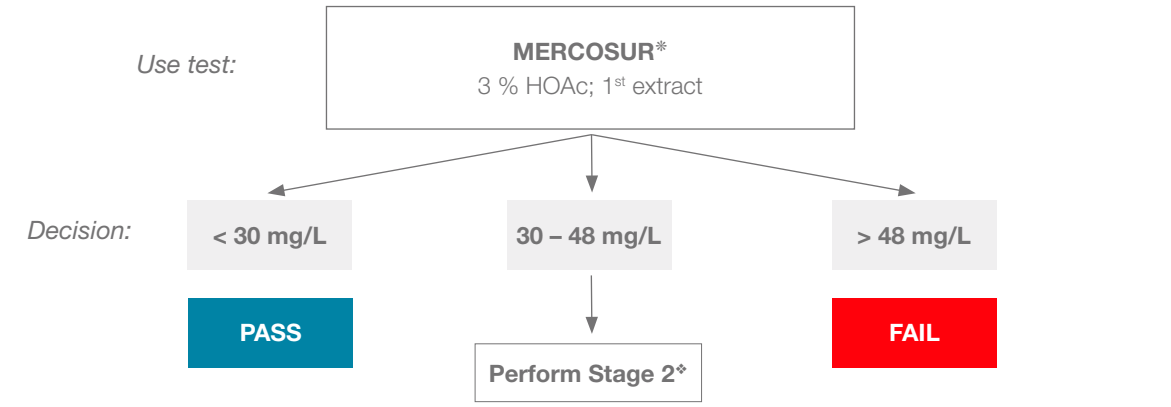
Protocol specified for OM from paper & board:



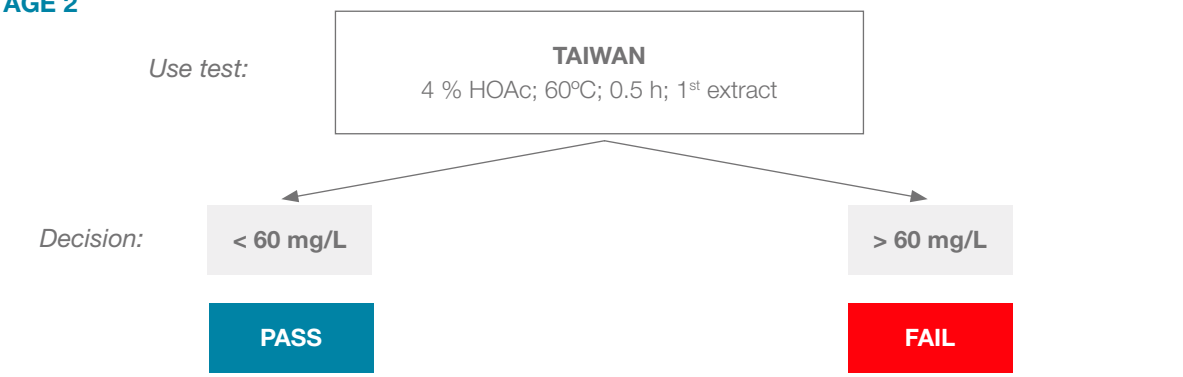
V. A. 11. 10. PROTOCOL: MERCOSUR–TW–OM

Protocol specified for OM from paper&board in acidic food simulant:

STAGE 1



STAGE 2

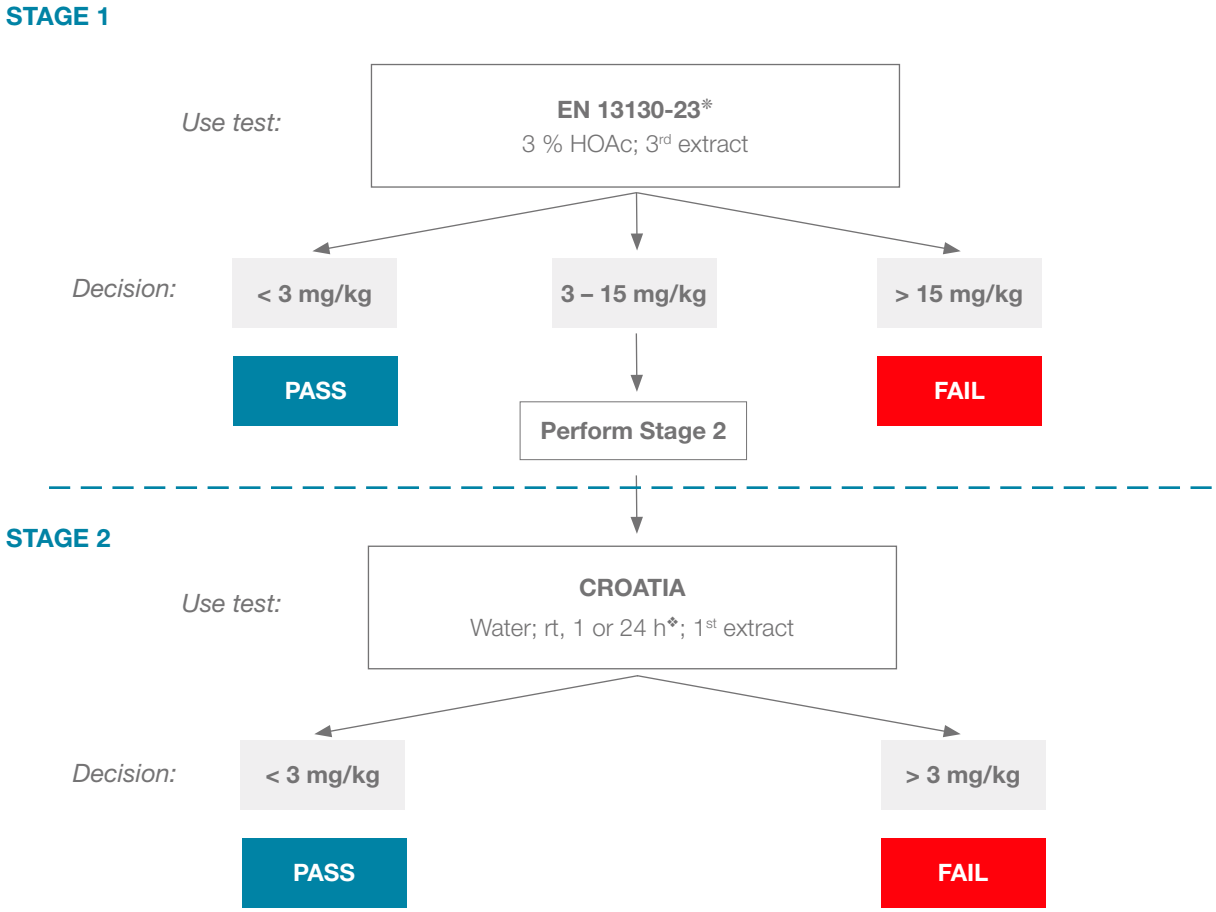


❊ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ If the article to be tested is a tableware product for cold and ambient use and for short time contact (*e.g.* napkins, placemats, etc.), skip stage 1 and proceed directly with stage 2.

V. A. 11. 11. PROTOCOL: ENCR–FORMALDEHYDE

Protocol specified for formaldehyde migration from wood articles.



❋ The appropriate time and temperature test conditions shall be selected according to section V. A. 10 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ If the article to be tested is a tableware for cold and/or ambient use for short term contact or for cold, ambient and/or hot use for a maximum time of $t = 120/2^{[(T-70)/10]}$: 1 h.

If the article to be tested is a tableware for cold and/or ambient use for long term-contact: 24 h.

V. B. PRODUCT HEALTH REQUIREMENTS ACCEPTABLE LIMITS FOR KITCHENWARE PRODUCTS

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V. B. 1. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF KITCHENWARE PRODUCTS MADE OF PLASTIC, RUBBER AND / OR SILICON RUBBER

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to plastic, rubber and/or silicon rubber materials included in Annexes I and II of this Standard. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of kitchenware products. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. B. 1. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table according to the specific plastic material:

Kitchenware products intended to be used in contact with all types of foodstuffs[288]				
Material	**Inditex Limit**	**Units**	**Test conditions[289]**	**Method**
ABS, AS, PS	30	mg/kg	(EN: 10 % EtOH; SK: water)	ENSK–OM or ENSK-OM-ST[290]
			4 % HOAc	GBSK–OM or GBSK-OM-ST[290]
		mg/L	20 % EtOH	SK[291]
	240	mg/L	n-heptane	
	60	mg/kg	Vegetable oil	EN 1186
ACRYLIC RESINS, MELAMINE, PA, PE, PP, PET, PETG, PLA and POM	30	mg/kg	(EN: 10 % EtOH; SK: water)	ENSK–OM or ENSK-OM-ST[290]
			4 % HOAc	GBSK–OM or GBSK-OM-ST[290]
		mg/L	n-heptane; 20 % EtOH	SK[291]
	60	mg/kg	Vegetable oil	EN 1186
RUBBER and SILICON RUBBER	50	mg/kg	10 % EtOH	GB 4806.11
			4 % HOAc	
			Vegetable oil	EN 1186
	60	mg/kg	50 % EtOH	GB 4806.11

288 Kitchenware products intended to come into contact with all types of food stuffs shall be analyzed in all food simulants established herein. Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7 as reference.

289 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.

290 See protocols in section V. B. 8 Select protocols according to the relevant product type.

291 Use the appropriate Korean methods according to the type of food contact material. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.

V. B. 1. 3. SPECIFIC MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the specific migration of the substances specified in the following table according to the specific plastic material:

Kitchenware products intended to be used in contact with all types of foodstuffs[292]					
Material	**Parameter**	**Inditex Limit**	**Units[293]**	**Test conditions[294]**	**Method**
ABS	Acrylonitrile monomer	nd[295]	mg/kg	4 % HOAc; 10 % EtOH vegetable oil	GB 31604.17 or EN 13130-3[296]
		0.02 (or 0.03 mg/m^3)[297]	mg/L	0.5 % HOAc + 2 % NaCl	EAEU[298]
	1,3-Butadiene	nd[295]	mg/kg	4 % HOAc; 10 % EtOH vegetable oil	GB 31604.12 or EN 13130-15[296]
	VOM	15	mg/dm^2	–	LFGB
	Hexane	0.100 (or 0.085 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[298]
	Heptane	0.100 (or 0.065 mg/m^3 [297])			
	Acrylonitile	0.020 (or 0.030 mg/m^3 [297])			
	Methylacrylate	0.020 (or 0.010 mg/m^3 [297])			
	Methylmethacrylate	0.250 (or 0.010 mg/m^3 [297])			
	Butyl acrylate	0.010 (or 0.0075 mg/m^3 [297])			
ACRYLIC RESINS	Methyl methacrylates[299]	6[300]	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.29 or EN 13130[296]
	Acrylates[301]	6[302]	mg/kg		
	VOM	0.5	%	–	LFGB
	Peroxides	nd	–	–	
	Hexane	0.100 (or 0.085 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU[298]
	Heptane	0.100 (or 0.065 mg/m^3 [297])			
	Acrylonitile	0.020 (or 0.030 mg/m^3 [297])			
	Methylacrylate	0.020 (or 0.010 mg/m^3 [297])			
	Methylmethacrylate	0.250 (or 0.010 mg/m^3 [297])			
	Butyl acrylate	0.010 (or 0.0075 mg/m^3 [297])			

Continued on next page

292 Kitchenware products intended to come into contact with all types of food stuffs shall be analysed in all food simulants established herein. Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.
293 Units mg/kg: it is referred to kg of food simulant.
294 See technical guidelines for compliance testing in section V. B. 7. for selecting the appropriate time and temperature test conditions according to the relevant product type.
295 LOD (limit of detection): 0.01 mg/kg.
296 For 4 % HOAc use the Chinese method; for 10 % EtOH, vegetable oil and/or other food simulants applicable to a single type of food or specific groups of foods use the European method.
297 This requirement applies to tableware in contact with non-fatty dry foodstuffs only
298 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.".
299 Only in compliance with the polymers and copolymers containing methacrylic acid derivatives. SML(T) specified for the following group restriction substances: 2-methylpropenoic acid; methyl methyacrylate; ethyl methacrylate; isobutyl methacrylate; butyl methacrylate; phenol, polymer with (R)-1-methyl-4-(1-methylethenyl)cyclohexene; 2-methyl-2-propenoicacianhydride; 2-hydroxyethyl-2-methyl-2-acrylate; phenyl methacrylate; 2-propenoic acid, 2-methyl-, propyl ester; benzyl methacrylate; sec-butyl methacrylate; iso-propyl methacrylate.
300 Expressed as methacrylic acid.
301 Only in compliance with the polymers and copolymers containing acrylic acid derivatives. SML(T) specified for the following group restriction substances:Polyacrylate; propenoic acid; methyl acrylate; 2-propenoic acid-2-methylpropyl ester; ethyl acrylate; butyl acrylate; iso-propyl acrylate; 2-hydroxyethyl acrylate; Propyl acrylate; 2-Propenoic acid, 1,1-dimethylethyl ester; Propenoic acid benzyl ester; 2-propenoic acid, octyl ester; Sec-butyl acrylate; 2-propenoic acid, polymer with 2-ethylhexyl 2-propenoate.
302 Expressed as acrylic acid.

Kitchenware products intended to be used in contact with all types of foodstuffs[292]					
Material	**Parameter**	**Inditex Limit**	**Units[293]**	**Test conditions[294]**	**Method**
AS	Acrylonitrile monomer	nd [295]	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.17 or EN 13130-3 [296]
		0.02 (or 0.03 mg/m^3 [297])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU [298]
	VOM	15	mg/dm^2	–	LFGB
	Styrene	0.010 (or 0.002 mg/m^3 [297])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU [298]
	Formaldehyde	0.100 (or 0.003 mg/m^3 [297])			
	Benzaldehyde	0.003 (or 0.040 mg/m^3 [297])			
MELAMINE	Formaldehyde	4	mg/L	4 % HOAc	GBSK-Formaldehyde[303]
		0.100 (or 0.003 mg/m^3 [297])		2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU [298]
	Phenol	5	mg/L	4 % HOAc	SK[304]
	Melamine monomer	2.5 / 1[305]	mg/kg		GBTW-melamine [303]
PA	Caprolactam	15	mg/kg	4 % HOAc	GB 31604.19
		0.500 (or 0.060 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU [298]
	Hexamethylendiamine	2.4	mg/kg	4 % HOAc	GB 31604.43
	PAA	nd [295]	mg/kg		EN 13130
	Laurolactam	5	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 316023.1 or EN 13130 [296]
					GB 31604.43 or EN 13130-21 [296]
	Ethylenediamine	12	mg/kg		
	Peroxides	nd	–	–	LFGB
	Methanol	0.200 (or 0.500 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid	EAEU [298]
	Benzene	0.010 (or 0.100 mg/m^3 [297])			
	Phenol	0.050 (or 0.003 mg/m^3 [297])			

Continued on next page

303 See protocol in section V. B. 8.

304 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".

305 1 mg/kg for materials and articles intended to be brought into contact with food intended for infants.

Kitchenware products intended to be used in contact with all types of foodstuffs[292]					
Material	**Parameter**	**Inditex Limit**	**Units[293]**	**Test conditions[294]**	**Method**
PET / PETG	Terephthalic acid	7.5	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	GB 31604.21 or EN 13130-2 [296]
	Isophthalic acid	5.0	mg/kg		GB 31604.1 or EN 13130 [296]
	Ethylene glycol	30	mg/kg		GB 31604.44
		1.000 (or 1.000 mg/m^3 [297])	mg/L	2 % HOAc + NaCl 2 %; 3 % lactic acid	EAEU [298]
	Acetaldehyde	6	mg/kg	4 % HOAc; 10 % EtOH; vegetable oil	See note[306]
		0.200 (or 0.010 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU [298]
	Dimethyl terephthalate	1.500 (or 0.010 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU [298]
	Formaldehyde	0.100 (or 0.003 mg/m^3 [297])			
	Methyl alcohol	0.200 (or 0.500 mg/m^3 [297])			
	Butyl alcohol	0.500 (or 0.100 mg/m^3 [297])			
	Isobutyl alcohol	0.500 (or 0.100 mg/m^3 [297])			
	Acetone	0.100 (or 0.350 mg/m^3 [297])			
PE / PP	Peroxides	nd	–	–	LFGB
	Formaldehyde	0.100 (or 0.003 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU [298]
	Acetaldehyde	0.200 (or 0.010 mg/m^3 [297])			
	Ethyl acetate	0.100 (or 0.100 mg/m^3 [297])			
	Hexane	0.100 (or 0.085 mg/m^3 [297])			
	Heptane	0.100 (or 0.065 mg/m^3 [297])			
	Acetone	0.100 (or 0.350 mg/m^3 [297])			
	Methyl alcohol	0.200 (or 0.500 mg/m^3 [297])			
	Propyl alcohol	0.100 (or 0.300 mg/m^3 [297])			
	Isopropyl alcohol	0.100 (or 0.600 mg/m^3 [297])			
	Butyl alcohol	0.500 (or 0.100 mg/m^3 [297])			
	Isobutyl alcohol	0.500 (or 0.100 mg/m^3 [297])			
PLA	Total lactic acid	30	µg/mL	Water	JP 370
POM	Formaldehyde	4	mg/L	4 % HOAc	GBSK-Formaldehyde [303]

Continued on next page

306 For 10 % EtOH, vegetable oil and/or other food simulants applicable to a single type of food or specific groups of foods use the European test method EN 13130. For acidic food simulant follow the protocol GBEN–acetaldehyde described in section V. B. 8.

Kitchenware products intended to be used in contact with all types of foodstuffs[292]					
Material	**Parameter**	**Inditex Limit**	**Units[293]**	**Test conditions[294]**	**Method**
PS	VOM	15	mg/dm^2	–	LFGB
	Peroxides	nd	–	–	LFGB
	Styrene	0.010 (or 0.010 mg/m^3 [297])	mg/L	0.5 % HOAc + 2 % NaCl	EAEU [298]
	Methyl alcohol	0.200 (or 0.500 mg/m^3 [297])			
	Butyl alcohol	0.500 (or 0.100 mg/m^3 [297])			
	Benzene	0.010 (or 0.100 mg/m^3 [297])			
	Toluene	0.500 (or 0.600 mg/m^3 [297])			
	Ethylbenzene	0.010 (or 0.020 mg/m^3 [297])			
RUBBER[307]	Nitrosamine	0.001	mg/dm^2	10 % EtOH; 3 % HOAc; Vegetal oil	EN 13130
	Nitrostable substances	0.01	mg/dm^2		
	Phenol	5	mg/L	4 % HOAc	SK [304]
	Formaldehyde	3	mg/L	3 % HOAc	LFGB
	Peroxides	nd	-	-	European Pharmacopoeia
	VOM	0.5	%	–	LFGB
SILICONE RUBBER	Organotin (as tin)	Absent[308]	mg/kg	3 % HOAc	EN 13130
	Peroxide	Absent[309]	%	–	LFGB
	VOM	0.5	%	–	LFGB
	Formaldehyde	0.100 (or 0.003 mg/m^3 [297])	mg/L	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU [298]
	Acetaldehyde	0.200 (or 0.010 mg/m^3 [297])	mg/L		
	Phenol	0.050 (or 0.003 mg/m^3 [297])	mg/L		
	Methyl alcohol	0.200 (or 0.500 mg/m^3 [297])	mg/L		
	Butyl alcohol	0.500 (or 0.100 mg/m^3 [297])	mg/L		
	Benzene	0.010 (or 0.100 mg/m^3 [297])	mg/L		

307 For articles made of butadiene rubber, nitrile rubber (*i.e.* acrylonitrile-butadiene rubber), isoprene rubber, ethylene-vinyl acetate rubber, ethylene and bicyclo (2,2,1) hept-2-ene rubber and ethylidene norborene rubber see the V. A. 2. 3 of this Standard for the specific migration requirements.

308 LOD (limit of detection): 0.01 mg/kg.

309 LOD (limit of detection): 0.005 % plastic.

V. B. 1. 4. RESIDUAL SUBSTANCES

To ensure compliance with Inditex requirements, the Supplier shall review the residual amount of the substances specified in the following table according to the specific plastic material:

Material	Parameter	Limit	Units	Method
ABS	Acrylonitrile monomer	11	mg/kg	FDA 21CFR §177.1020
	Volatile substances[310]	5000	mg/kg	SK[311]
	1,3-Butadiene	1	mg/kg	SK[311] or GB 31604.12
	Styrene monomer	0.5	%	GB 31604.16
AS	Acrylonitrile monomer	50[312]	mg/kg	FDA 21CFR §177.1040
	Volatile substances[310]	5000	mg/kg	SK[311]
	Styrene monomer	0.5	%	GB 31604.16
PS[313]	Volatile substances[310]	5000	mg/kg	JP 370
	Styrene monomer	0.5	%	GB 31604.16
NATURAL RUBBER	Boric acid	nd	mg/kg	GC-MS
	Pentachlorophenol and its sodium salts			
	Hydroxylamine			
	p-nitrophenol			

310 Tested volatile substances are styrene, toluene, ethyl benzene, isopropyl benzene and propyl benzene.

311 Use the appropriate Korean methods according to the food contact material used. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.

312 This limit applies to articles produced by 45-65 parts by weight of acrylonitrile and 35-55 parts by weight of styrene. Articles made of this specific concentration of monomers, shall not be used at temperatures that exceeds 93ºC.

For articles produced by 66-72 parts by weight of acrylonitrile and 28-34 parts by weight of styrene and intended to use in contact with:
- nonalcoholic beverages at a usage temperature up to 65ºC, the applicable limit shall be 80 ppm.
- beverages containing up to 8 % alcohol and nonalcoholic beverages, at a usage temperature up to 65ºC, the applicable limit shall be 0.10 ppm.

313 For PS foam contact Inditex Sustainability Department.

V. B. 1. 5. METALS

To ensure compliance with Inditex requirements, the Supplier shall review the metal migration and metal content requirements specified in the following tables according to the specific plastic material:

Material	Parameter	Limit	Units	Method
ABS, AS, ACRYLIC RESINS, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP, PS, RUBBER and SILICON RUBBER	Al	1.00	mg/kg	GBEN-metals[314] (ICP-MS or ICP-OES analysis)
	Ba	1.00	mg/kg	
	Cd	0.002 (0.01 for rubber products)	mg/kg	
	Co	0.05	mg/kg	
	Cu	5.00 (4 mg/kg for rubber products)	mg/kg	
	Eu	0.05	mg/kg	
	Fe	48	mg/kg	
	Gd	0.05	mg/kg	
	Ge[315]	0.1	mg/kg	
	La	0.05	mg/kg	
	Li	0.60	mg/kg	
	Mn	0.60	mg/kg	
	Ni	0.02	mg/kg	
	Sb	0.04	mg/kg	
	Sn	0.01	mg/kg	
	Tb	0.05	mg/kg	
	Zn	5.00	mg/kg	
	Ag, As, Bi, Hg, Mo and Pb	0.01	mg/kg	

Metal Content										
Material	Limit (mg/kg)									Method
	Cd	Cr	Hf	Pb	V	Zn	Zr	Hg; Sb; As	Sum of Pb, Cd, Cr (VI) and Hg	
ABS, AS, ACRYLIC RESINS, MELAMINE, PA, PLA, POM, PS and SILICON RUBBER	nd			nd					100	Acid digestion / ICP
PE and PP	nd	10	100	nd	20		100		100	
PET[316]	nd			nd		80			100	
RUBBER	1			1		3 %		1	100	
nd: < 2 mg/kg										

314 See protocol in section V. B. 8.
315 This parameter is only applicable to PET.
316 For PET articles, besides complying with the metal content limits shown previously, the metal content shall not exceed the following limits: antimony (Sb): 350 mg/kg; gallium (Ga): 20 mg/kg; germanium (Ge): 100 mg/kg; cobalt (Co): 125 mg/kg; lithium (Li): 130 mg/kg; manganese (Mn): 140 mg/kg; titanium (Ti): 120 mg/kg; phosphorous (P): 125 mg/kg.

V. B. 1. 6. POTASSIUM PERMANGANATE - $KMnO_4$ - CONSUMPTION

To ensure compliance with Inditex requirements, the Supplier shall review the potassium permanganate consumption as specified in the following table:

Material	Limit	Units	Test conditions	Method
ABS, AS, ACRYLIC RESINS, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP and PS	10	mg/kg	Water, 60ºC, 2 h	GB 31604.2
RUBBER and SILICON RUBBER			Water, 60ºC, 0.5 h	

V. B. 1. 7. COLOUR MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the colour migration as specified in the following table:

Material	Parameter	Limit	Test Method
ABS, AS, ACRYLIC RESINS, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP and PS[317]	Colour	nd	GB 31604.7
	Turbidity and sediment		Instr. No. 880-71
RUBBER and SILICON RUBBER[317]	Colour		ITX-GB 31604.7[318]
SILICON RUBBER	Turbidity and sediment		Instr. No. 880-71

V. B. 1. 8. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

To ensure compliance with Inditex requirements, the Supplier shall review all the parameters specified in the following table:

Material	Parameter	CAS No	Limit[319]	Secondary Limits
			mg/kg	mg/kg
ABS, AS, ACRYLIC, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP, PS, RUBBER and SILICON RUBBER	Benzo(a)pyrene	50-32-8	< 0.2	< 0.2
	Benzo(e)pyrene	192-97-2	< 0.2	< 0.2
	Benzo(a)anthracene	56-55-3	< 0.2	< 0.2
	Benzo(b)fluoranthene	205-99-2	< 0.2	< 0.2
	Benzo(j)fluoranthene	205-82-3	< 0.2	< 0.2
	Benzo(k)fluoranthene	207-08-9	< 0.2	< 0.2
	Chrysene	218-01-9	< 0.2	< 0.2
	Dibenzo(a,h)anthracene	53-70-3	< 0.2	< 0.2
	Benzo(ghi)perylene	191-24-2	< 0.2	< 0.2
	Indeno (1,2,3-cd)pyrene	193-39-5	< 0.2	< 0.2
	Phenanthrene	85-01-8	< 1 Sum	< 5 Sum
	Pyrene	129-00-0		
	Anthracene	120-12-7		
	Fluoranthene	206-44-0		
	Naphthalene	91-20-3	< 1	< 2
	Sum of 15 PAH	–	< 1	< 5

317 Applicable only to colored materials.

318 This test method is based on the GB 31604-7; nevertheless, according to Inditex own requirements, the colour migration shall be determined only in the migration extracts.

319 If the limits are surpassed but the secondary limits are still met, the confirmation of suitability of the kitchenware product can be verified by an additional specific migration test of the PAH components according to EN 13130 test method followed by GC-MS analysis. To comply with Inditex requirements, PAHs shall not be detected in the 1st migration extract (LOD: 0.01 mg/kg (sum of PAHs). If applicable, the PAHs specific migration shall be determined using the following test conditions:

V. B. 1. 9. PRIMARY AROMATIC AMINES

To ensure compliance with Inditex requirements, the Supplier shall review the primary aromatic amines specific migration as specified in the following table:

Material	Parameter	Limit	Test conditions[320]	Test Method
ABS, AS, ACRYLIC RESIN, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP, PS, RUBBER and SILICON RUBBER	Primary aromatic amines	nd[321]	3 % HOAc	EN13130-1:2004 and Kunststoffe im lebensmittelverkehr Book Teil B II XXI
RUBBER	Sum of Primary aromatic amines and secondary aromatic amines	1mg/kg		

V. B. 1. 10. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
ABS, AS, ACRYLIC RESIN, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP, PS, RUBBER and SILICON RUBBER	≤ 2.5[322]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

V. B. 1. 11. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 10/2011 of 14th January 2011 on Food Contact Materials made of plastic and its amendments.

– EU members are aligned with the European Union Positive List ("The Union List") declared on Commission Regulation 10/2011 and its amendments.

Food simulants: Kitchenware products intended to come into contact with all types of food stuffs shall be analyzed in 10 % EtOH, 3 % HOAc and vegetal oil. Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.

Contact time and temperature: See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.

320 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.

321 PAAs listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006, and for which no migration limit is specified in Table 1 of Annex I of Regulation 10/2011: LOD (limit of detection): 0,002 mg/kg food simulant (each individual PAA).
For PAAs other than above, which no specific migration limit is specified in Annex I of Regulation 10/2011: LOD (limit of detection): 0,01 mg/kg food simulant (sum of PAAs).

322 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

– BfR III. Polyethylene.

– BfR V. Polystyrene Produced exclusively from the Polymerisation of Styrene.

– BfR VI. Styrene Copolymers and Graft Polymers, and Mixtures of Polystyrene with other Polymers.

– BfR VII. Polypropylene.

– BfR IX. Colorants for Plastics and other Polymers Used in Commodities

– BfR X. Polyamides.

– BfR XV. Silicones.

– BfR XVII. Poly(terephthalic acid diol esters).

– BfR XXI. Commodities based on natural and synthetic rubber.

– BfR XXII. Polymers Based on Esters of Acrylic and Methacrylic Acids, their Copolymers, and Mixtures of these with other Polymers.

– Product Safety Act (Produktsicherheitsgesetz - ProdSG).

- **French regulation:**

– Decree No. 92-631 and its amendments.

– Decree No. 2007-766 and its amendments.

– Arrête du 25 novembre 1992 relatif aux matériaux et objets en élastomères de silicone mis ou destinés à être mis au contact des denrées, prudits et boissons alimentaires.

– Arrêté du 9 novembre 1994 relatif aux matériaux et objets en caoutchouc destinés à être mis au contact des denrées alimentaires.

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/003).

- **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 9685-2016 National Food Safety Standard for Uses of Additives in Food Contact Materials and Their Products.

– GB 4806.6-2016 National Food Safety Standard for Plastic Resin Intended to Come into Contact with Food.

– GB 4806.7-2016 National Food Safety Standard for Plastic Materials and Articles Intended to Come into Contact with Food.

– GB 4806.11-2016 National Food Safety Standard for Rubber Materials and Articles Intended for Come into Contact with Food.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

– Positive List system for food utensils and containers and packaging. (Notification No. 196 of 2020).

• **USA regulation:**

– United States of America legislation by the Federal Drug Administration (FDA) - Code of Federal Regulations (CFR):

  – 21 CFR Part 174 on indirect food additives: general.

  – 21 CFR Part 175 on indirect food additives: adhesives and components of coatings.

  – 21 CFR Part 177 on indirect food additives: polymers.

  – 21 CFR Part 178 on indirect food additives: adjuvants, production aids and sanitizers.

• **Korean regulation:**

– "Standards and Specifications for Food Utensils, Containers and Packages" (2019) and its amendments.

• **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials"

V. B. 1. 12. SUMMARY

The following is a comprehensive summary of the parameters previously discussed. It is included to provide a general picture of the global requirements.

Material	OM	Test Items & Inditex Limits						
		Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[323]	PAHs	Sensory Test
ABS	30 – 240 mg/kg	Acrylonitrile monomer	nd[324] - 0.02 mg/L (or 0.03 mg/m^3[325])	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
			11 mg/kg					
		1,3-Butadiene	nd[324]					
			1 mg/kg					
		VOM	15 mg/dm^2					
		Styrene	0.010 (or 0.002 mg/m^3[325])					
		Xylols (isomer mixture)	0.010 (or 0.002 mg/m^3[325])					
		Alpha-Methylstyrene	0.100 (or 0.040 mg/m^3[325])					
		Benzene	0.010 (or 0.100 mg/m^3[325])					
		Toluene	0.500 (or 0.600 mg/m^3[325])					
		Ethylbenzene	0.010 (or 0.020 mg/m^3[325])					
		Benzaldehyde	0.003 (or 0.040 mg/m^3[325])					
		Volatile Substances[327]	5000 mg/kg					
		Sytrene monomer	0.5 %					
AS	30 – 240 mg/kg	Acrylonitrile monomer	nd[324] - 0.02 mg/L (or 0.03 mg/m^3[325])	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
			Residual: 50 ppm[328]					
		VOM	15 mg/dm^2					
		Styrene	0.010 mg/L (or 0.002 mg/m^3[325])					
		Formaldehyde	0.100 mg/L (or 0.003 mg/m^3[325])					
		Benzaldehyde	0.003 mg/L (or 0.040 mg/m^3[325])					
		Volatile Substances[327]	5000 mg/kg					
		Sytrene monomer	0.5 %					

Continued on next page

323 Only for coloured plastics.

324 - Specific migration & Residual substances: nd= 0.01 (mg/kg).
- PAA: PAAs listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006, and for which no migration limit is specified in Table 1 of Annex I of Regulation 10/2011: LOD (limit of detection): 0,002 mg/kg food simulant (each individual PAA). For PAAs other than above, which no specific migration limit is specified in Annex I of Regulation 10/2011: LOD (limit of detection): 0,01 mg/kg food simulant (sum of PAAs).

325 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.

326 PAHs limit:<0.2 mg/kg (Naphthalene < 1mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: <1mg/kg); Sum of 15 PAH < 1 mg/kg. PAHs secondary limit: < 0.2 mg/kg (Naphthalene < 2 mg/kg; Sum of phenanthrene, pyrene, anthracene, fluoranthene: <5 mg/kg; Sum of 15 PAH < 5 mg/kg). If the PAHs limits are surpassed but the PAHs secondary limits are still met, the confirmation of suitability of the kitchenware product can be verified by an additional specific migration test of the PAH components. In this case, PAHs shall not be detected in the 1st migration extract (LOD (limit of detection): 0.01 mg/kg (sum of PAHs).

327 Testing Volatile substances (Japan) are styrene, toluene, ethyl benzene, isopropyl benzene, propylbenzene.

328 This limit applies to articles produced by 45-65 parts by weight of acrylonitrile and 35-55 parts by weight of styrene. Articles made of this specific concentration of monomers, shall not be used at temperatures that exceeds 93ºC.
For articles produced by 66-72 parts by weight of acrylonitrile and 28-34 parts by weight of styrene and intended to use in contact with:
- nonalcoholic beverages at a usage temperature up to 65ºC, the applicable limit shall be 80 ppm.
- beverages containing up to 8 % alcohol and nonalcoholic beverages, at a usage temperature up to 65ºC, the applicable limit shall be 0.10 ppm.

Material	OM	Test Items & Inditex Limits						
		Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[323]	PAHs	Sensory Test
ACRYLIC RESIN	30 – 60 mg/kg	Methyl methacrylates[329]	6 mg/kg	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
		Acrylates[330]	6 mg/kg					
		VOM	0.5 %					
		Peroxides	nd					
		Hexane	0.100 mg/L (or 0.085 mg/m³[325])					
		Heptane	0.100 mg/L (or 0.065 mg/m³[325])					
		Acrylonitile	0.020 mg/L (or 0.030 mg/m³[325])					
		Methylacrylate	0.020 mg/L (or 0.010 mg/m³[325])					
		Methylmethacrylate	0.250 mg/L (or 0.010 mg/m³[325])					
		Butyl acrylate	0.010 mg/L (or 0.0075 mg/m³[325])					
MELAMINE	30-50 mg/kg	Formaldehyde	4 mg/L	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
			0.100 mg/L (or 0.003 mg/m³[325])					
		Phenol	5 mg/L					
		Melamine monomer	2.5 / 1[331]					
PA	30 – 60 mg/kg	Caprolactam	15 mg/kg	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
			0.500 mg/L (or 0.060 mg/m³[325])					
		Hexamethylen-diamine	2.4 mg/kg					
			0.010 mg/L (or 0.001 mg/m³[325])					
		Ethylene-diamine	12 mg/kg					
		Laurolactam	5 mg/kg					
		Peroxides	nd					
		Methanol	0.200 mg/L (or 0.500 mg/m³[325])					
		Benzene	0.010 mg/L (or 0.100 mg/m³[325])					
		Phenol	0.050 mg/L (or 0.003 mg/m³[325])					

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329 Only in compliance with the polymers and copolymers containing methacrylic acid derivatives. [2-methylpropenoic acid; methyl methacrylate; ethyl methacrylate; isobutyl methacrylate; butyl methacrylate; phenol, polymer with (R)-1-methyl-4-(1-methylethenyl) cyclohexene; 2-methyl-2-propenoicacianhydride; 2-hydroxyethyl-2-methyl-2-acrylate; phenyl methacrylate; 2-propenoic acid, 2-methyl-, propyl ester; benzyl methacrylate; sec-butyl methacrylate; iso-propyl methacrylate].

330 Only in compliance with the polymers and copolymers containing acrylic acid derivatives. [Polyacrylate; propenoic acid; methyl acrylate; 2-propenoic acid-2-methylpropyl ester; ethyl acrylate; butyl acrylate; iso-propyl acrylate; 2-hydroxyethyl acrylate; Propyl acrylate; 2-Propenoic acid, 1,1-dimethylethyl ester; Propenoic acid benzyl ester; 2-propenoic acid, octyl ester; Sec-butyl acrylate; 2-propenoic acid, polymer with 2-ethylhexyl 2-propenoate].

331 1 mg/kg for materials and articles intended to be brought into contact with food intended for infants.

Material	OM	Test Items & Inditex Limits						
		Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[323]	PAHs	Sensory Test
PE /PP	30 – 60 mg/kg	Peroxides[332]	nd	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
		Formaldehyde	0.100 mg/L (or 0.003 mg/m^3 [325])					
		Acetaldehyde	0.200 mg/L (or 0.010 mg/m^3 [325])					
		Ethyl acetate	0.100 mg/L (or 0.100 mg/m^3 [325])					
		Hexane	0.100 mg/L (or 0.085 mg/m^3 [325])					
		Heptane	0.100 mg/L (or 0.065 mg/m^3 [325])					
		Acetone	0.100 mg/L (or 0.350 mg/m^3 [325])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m^3 [325])					
		Propyl alcohol	0.100 mg/L (or 0.300 mg/m^3 [325])					
		Isopropyl alcohol	0.100 mg/L (or 0.600 mg/m^3 [325])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [325])					
		Isobutyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [325])					
PET / PETG	30 – 60 mg/kg	Terephthalic acid	7.5 mg/kg	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
		Acetaldehyde	6 mg/kg					
			0.200 mg/L (or 0.010 mg/m^3 [325])					
		Isophthalic acid	5.0 mg/kg					
		Ethylene glycol	30 mg/kg					
			1.000 mg/L (or 1.000 mg/m^3 [325])					
		Dimethyl terephthalate	1.500 mg/L (or 0.010 mg/m^3 [325])					
		Formaldehyde	0.100 mg/L (or 0.003 mg/m^3 [325])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m^3 [325])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [325])					
		Isobutyl alcohol	0.500 mg/L (or 0.100 mg/m^3 [325])					
		Acetone	0.100 mg/L (or 0.350 mg/m^3 [325])					
PLA	30 – 60 mg/kg	Total lactic acid	30 mg/L	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
POM	30 – 60 mg/kg	Formaldehyde	4 mg/L	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1

Continued on next page

332 This requirement only applies to PE.

Material	OM	Test Items & Inditex Limits						
		Specific Migration & Residual Substances		$KMnO_4$ Consumption	PAA	Colour Migration[323]	PAHs	Sensory Test
PS	30 – 240 mg/kg	VOM	15 mg/dm²	10 mg/kg	nd[324]	nd	note[326]	≤ 2.5 / ≤ 1
		Volatile Substances[327]	5000 mg/kg					
		Styrene monomer	0.5 %					
		Peroxides	nd					
		Styrene	0.010 mg/L (or 0.010 mg/m³[325])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m³[325])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m³[325])					
		Benzene	0.010 mg/L (or 0.100 mg/m³[325])					
		Toluene	0.500 mg/L (or 0.600 mg/m³[325])					
		Ethylbenzene	0.010 mg/L (or 0.020 mg/m³[325])					
RUBBER	50 – 60 mg/kg	Nitrosamine	0.001 mg/dm²	10 mg/kg	nd[324]	–	note[326]	≤ 2.5 / ≤ 1
		Nitrostable substances	0.01 mg/dm²					
		Phenol	5 mg/L					
		Formaldehyde	3 mg/L					
		VOM	0.5 %					
		Peroxides	nd					
		p-nitrophenol Boric acid; Pentachlorophenol and its sodium salts; Hydroxylamine	nd (only apply to natural rubber)					
		2-Mercaptoimidazoline	nd					
SILICON RUBBER	50 – 60 mg/kg	Organotin (as tin)	Absent[333]	10 mg/kg	nd[324]	–	note[326]	≤ 2.5 / ≤ 1
		Peroxide	Absent[334]					
		VOM	0.5 %					
		Formaldehyde	0.100 mg/L (or 0.003 mg/m³[325])					
		Acetaldehyde	0.200 mg/L (or 0.010 mg/m³[325])					
		Phenol	0.050 mg/L (or 0.003 mg/m³[325])					
		Methyl alcohol	0.200 mg/L (or 0.500 mg/m³[325])					
		Butyl alcohol	0.500 mg/L (or 0.100 mg/m³[325])					
		Benzene	0.010 mg/L (or 0.100 mg/m³[325])					

333 LOD (limit of detection): 0.01 mg/kg.
334 LOD (limit of detection): 0.005 % plastic.

Material	Parameter	Limit	Units	Method
ABS, AS, ACRYLIC RESINS, MELAMINE, PA, PE, PET, PETG, PLA, POM, PP, PS, RUBBER and SILICON RUBBER	Al	1.00	mg/kg	GBEN-metals[335] (ICP-MS or ICP-OES analysis)
	Ba	1.00	mg/kg	
	Cd	0.002 (0.01 for rubber products)	mg/kg	
	Co	0.05	mg/kg	
	Cu	5.00 (4 mg/kg for rubber products)	mg/kg	
	Eu	0.05	mg/kg	
	Fe	48	mg/kg	
	Gd	0.05	mg/kg	
	Ge[336]	0.1	mg/kg	
	La	0.05	mg/kg	
	Li	0.60	mg/kg	
	Mn	0.60	mg/kg	
	Ni	0.02	mg/kg	
	Sb	0.04	mg/kg	
	Sn	0.01	mg/kg	
	Tb	0.05	mg/kg	
	Zn	5.00	mg/kg	
	Ag, As, Bi, Hg, Mo and Pb	0.01	mg/kg	

Metal Content										
Material	Limit (mg/kg)									Method
	Cd	Cr	Hf	Pb	V	Zn	Zr	Hg; Sb; As	Sum of Pb, Cd, Cr (VI) and Hg	
ABS, AS, ACRYLIC RESINS, MELAMINE, PA, PLA, POM, PS and SILICON RUBBER	nd			nd					100	Acid digestion / ICP
PE and PP	nd	10	100	nd	20		100		100	
PET[337]	nd			nd		80			100	
RUBBER	1			1		3 %		1	100	
nd: < 2 mg/kg										

Further information related to the aforementioned parameters is detailed in previous sections of this chapter.

335 See protocol in section V. B. 8.
336 This parameter is only applicable to PET.
337 For PET articles, besides complying with the metal content limits shown previously, the metal content shall not exceed the following limits: antimony (Sb): 350 mg/kg; gallium (Ga): 20 mg/kg; germanium (Ge): 100 mg/kg; cobalt (Co): 125 mg/kg; lithium (Li): 130 mg/kg; manganese (Mn): 140 mg/kg; titanium (Ti): 120 mg/kg; phosphorous (P): 125 mg/kg.

V. B. 2. PRODUCT HEALTH REQUIREMENTS FOR KITCHENWARE PRODUCTS MADE OF CERAMIC, GLASS AND / OR NATURAL ROCKS

V. B. 2. 1. OVERALL MIGRATION 180

V. B. 2. 2. LEAD, CADMIUM & OTHER HEAVY METALS 180

V. B. 2. 3. ADDITIONAL CONSIDERATIONS 184

V. B. 2. 4. APPLICABLE REGULATIONS 184

V. B. 2. 1. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table:

Overall Migration			
Material	**Inditex Limit**	**Test conditions[338]**	**Method**
CERAMIC (glazed, unglazed and decorated)	60 mg/kg	3 % HOAc, 3rd migration extract	EN 1186
BOROSILICATE AND SODE-LIME GLASS Cookware, bakeware and microwave	50 mg/kg	Water, 120ºC, 30 min., 1st migration extract	IT[339]
SODE-LIME GLASS Food preparation ware and storage	50 mg/kg	Water, 80ºC, 2 h, 1st migration extract	

V. B. 2. 2. LEAD, CADMIUM & OTHER HEAVY METALS

Test method ITX- EN1388-1/2

Migration method: the method to be used is based on the European standard EN1388-1/2 (test conditions: 4 % acetic acid; 24 h; 22ºC), but according to Inditex requirements three successive extractions must be carried out in the test. Finally, the 1st and 3rd extractions will be analysed:

– For 1st extraction results: metal migration limits specified in the tables shown in point 1 of this section shall be considered.

– For 3rd extraction results: metal migration limits specified in the table shown in point 2 of this section shall be considered.

Analysis method: all the metals will be analysed by AAS (Atomic Absorption spectrophotometry), ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrophotometry) or ICP-MS (Inductively Coupled Plasma - Mass Spectrometry); except Cr (VI), by diphenylcarbazide colorimetry according to NF T 90-043 or any other equivalent method.

Test methods GB 31604.4 and GB 31604.5

Migration Method:

– For articles made of ceramic intended for cooking and analysed according to the Chinese method, three successive extractions must be carried out (test conditions: 4 % acetic acid; 2 h; 98ºC). Finally, only the 3rd extraction will be analysed. The metal migration limits are specified in the table shown in point 2a of this section.

– For articles made of glass intended for cooking and analysed according to the Chinese method, three successive extractions must be carried out (test conditions: 4 % acetic acid; 2 h; 98ºC). Finally, only the 3rd extraction will be analysed. The metal migration limits are specified in the table shown in point 2b of this of this section.

– For articles made of ceramic or glass intended for microwave and analysed according to the Chinese method, three successive extractions must be carried out (test conditions: 4 % acetic acid; 15 min; 100ºC). Finally, only the 3rd extraction will be analysed. The metal limits are specified in the tables shown in points 2a and 2b of this section.

Analysis method: all the metals will be analysed by AAS (Atomic Absorption spectrophotometry), ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrophotometry) or ICP-MS (Inductively Coupled Plasma - Mass Spectrometry).

338 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.

339 Use the appropriate Italian method according to the Ministerial Decree of 21 March 1973 and its amendments (Chapter 5, Art. 35).

1. First migration limits for kitchenware products made of ceramic and/or glass

a) Kitchenware products made of ceramic:

Material	Type of Product[340]		Parameter	Limit	Units	Method
CERAMIC (Other than cookingware and bakeware, glazed, unglazed and decorated)	**Cat. 1**	**Flatware** (depth < 25 mm)	Pb	1.5[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.07	mg/dm^2	
			Co	0.1	mg/dm^2	
	Cat. 2	**Small Hollowware** (depth > 25 mm) (< 1.1 L)	Pb	2[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.3[342]	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
		Large Hollowware (depth > 25 mm) (1.1-3 L)	Pb	1[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.25[342]	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
	Cat. 3	**Large Hollowware** (depth > 25 mm) (> 3 L)	Pb	0.5[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.1[342]	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
		Pitchers (> 3 L)	Pb	0.5[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.1[342]	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	
CERAMIC Cookingware, bakeware and microwave (glazed, unglazed and decorated)	**Cat.1**	**Flatware** (depth < 25 mm)	Pb	0.5[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.05	mg/L	
			Co	0.1	mg/dm^2	
	Cat. 2 and Cat. 3	**Hollowware** (depth > 25 mm)	Pb	0.5[341]	mg/L	ITX-EN 1388-1/2
			Cd	0.05[342]	mg/L	
			Co	0.05	mg/L	
			As	0.05	mg/L	

340 See product type definitions in Annex III and/or in the regulations mentioned in section V. B. 2. 4 of this chapter.
341 If the Pb migration result exceeds 0.226 mg/kg for flatware or 0.1 mg/kg for hollowware and pitchers and the article is to be commercialized in California, a specific warning label must be included following the applicable Californian regulation.
342 If the Cd migration result exceeds 0.189 mg/kg for small hollowware or 0.049 mg/kg for large hollowware and pitchers and the article is to be commercialized in California, a specific warning label must be included following the applicable Californian regulation.

Additional requirements for kitchenware products made of ceramic					
	Type of products	**Parameter**	**Limit**	**Unit**	**Method**
CERAMIC (glazed, unglazed and decorated)	**All type of kitchenware products**	B	0.500	mg/L	ITX-EN 1388-1/2
		Zn	1.000	mg/L	
		Ti	0.100	mg/L	
		Al	0.500	mg/L	
		Ba	0.100	mg/L	
		Mn	0.100	mg/L	
		Cu	1.000	mg/L	
		Cr (III) and Cr (VI)	0.100	mg/L	
		Li[343]	0.030	mg/L	

b) Kitchenware products made of glass:

Material	Type of Product[344]		Parameter	Limit	Units	Method
GLASS WITHOUT INTERNAL DECORATION (All types of products)			Pb	0.05	mg/L	ITX-EN 1388-1/2
			Cd	0.005	mg/L	
GLASS WITH INTERNAL DECORATION	**Cat. 1**	**Flat container Flatware**	Pb	0.8	mg/dm^2	ITX-EN 1388-1/2
			Cd	0.07	mg/dm^2	
			Co	0.1	mg/dm^2	
			Cr (VI)[345]	0.005	mg/dm^2	
	Cat. 2	**Small container Hollowware** (< 600 mL)	Pb	1.5	mg/L	ITX-EN 1388-1/2
			Cd	0.3	mg/L	
			Co	0.05	mg/L	
			Cr (VI)[345]	0.03	mg/L	
		Big Container Large ware (between 600 mL & 3 L)	Pb	0.75	mg/L	ITX-EN 1388-1/2
			Cd	0.25	mg/L	
			Co	0.05	mg/L	
			Cr (VI)[345]	0.03	mg/L	
	Cat. 3	**Storage Tank Hollowware** (> 3 L)	Pb	0.5	mg/L	ITX-EN 1388-1/2
			Cd	0.1	mg/L	
			Co	0.05	mg/L	
			Cr (VI)[345]	0.03	mg/L	
	Cookware, bakeware and microwave		Pb	0.5	mg/L	ITX-EN 1388-1/2
			Cd	0.05	mg/L	
			Cr (VI)[345]	0.03	mg/L	

343 Only applies to porcelain articles.
344 See product type definitions in Annex III and/or in the regulations mentioned in section V. B. 2. 4 of this chapter.
345 Applies only to decorated glass and crystal.

Additional requirements for kitchenware products made of glass					
	Type of products	Parameter	Limit	Unit	Method
GLASS	All type of kitchenware products	Al	0.500	mg/L	ITX-EN 1388-1/2
		As	0.050	mg/L	
		B	0.500	mg/L	
		Ba	0.100	mg/L	
		Cr (III) and Cr (VI)	0.100	mg/L	
		Cu	1.000	mg/L	
		Mn	0.100	mg/L	

2. Third migration limits for kitchenware products made of ceramic and/or glass

a) Kitchenware products made of ceramic:

Material	Type of Product[346]	Parameter	Limit (mg/L)	Method
CERAMIC (Other than cooking ware, glazed, unglazed and decorated)	Flatware	Pb	0.8 mg/dm^2	ITX-EN1388-1/2
		Cd	0.07 mg/dm^2	
	Small Hollowware	Pb	2	
		Cd	0.3	
	Large Hollowware	Pb	1	
		Cd	0.25	
	Storage pitchers	Pb	0.5	
		Cd	0.25	
CERAMIC Cooking ware and microwave (glazed, unglazed and decorated)	All types of articles	Pb	3	GB 4806.4 with reference to GB 31604.34
		Cd	0.3	GB 4806.4 with reference to GB 31604.24
CERAMIC (including cooking ware and microwave, glazed, unglazed and/or decorated)	All types of articles	Al	1	ITX-EN1388-1/2
		As	nd (0.002)	
		B	1	
		Ba	1	
		Co	0.02	
		Cr	0.1	
		Cu	4	
		Hg	0.005	
		Li	0.6	
		Mn	0.6	
		Ni	0.02	
		Sb	0.04	
		Se	0.01	
		Sr	1	
		Rb	1	
		Zn	3	

346 See product type definitions in Annex III and/or in the regulations mentioned in section V. B. 2. 4 of this chapter.

b) Kitchenware products made of glass:

Material	Type of Product[347]	Parameter	Limit (mg/L)	Method
GLASS AND CRYSTAL (including cooking ware and microwave)	**All types of articles**	Al	1	ITX-EN1388-1/2
		As	nd (0.002)	
		B	1	
		Ba	1	
		Cd	0.01	
		Ce	1	
		Co	0.02	
		Cr	0.1	
		Cu	4	
		Li	0.6	
		F	1	
		Mn	0.6	
		Ni	0.02	
		Pb	0.1	
		Sb	0.04	
		Rb	1	
		Zn	3	
		Zr	0.05	
GLASS AND CRYSTAL Cooking ware and microwave	**All types of articles**	Cd	0.05	GB 4806.5 with reference to GB 31604.24
		Pb	0.5	GB 4806.5 with reference to GB 31604.34

V. B. 2. 3. ADDITIONAL CONSIDERATIONS

If a kitchenware article or utensil is made of a natural rock, it shall comply with the specifications provided for ceramic articles in sections V. B. 2. 1 and V. B. 2. 2 of this chapter.

In case the surface in contact with food of the article made of ceramic or glass is modified by treatment with a material different from ceramic or glass, the article should also be compliant with the requirements specified in section V. B. 5 of this Standard.

V. B. 2. 4. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Council Directive of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs (84/500/EEC) and its amendment (2005/31/EC).

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

347 See product type definitions in Annex III and/or in the regulations mentioned in section V. B. 2. 4 of this chapter.

• **French regulation:**

– Decree No. 92-631 and its amendments.

– Decree No. 2007-766 and its amendments.

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/002).

• **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

– Ministerial Decree of 4 April 1985.

• **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

• **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.4-2016 National Food Safety Standard for Ceramic ware.

– GB 4806.5-2016 National Food Safety Standard for Glass products.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **Korean regulation:**

– "Standards and Specifications for Food Utensils, Containers and Packages" (2019) and its amendments.

• **USA regulation:**

– CPG 7117.06 leaching of Cadmium.

– CPG 7117.07 leaching of Lead.

– ASTM C927-1980 (2004) Lead and Cadmium extracted from the lip and rim area of glass tumblers externally decorated with ceramic glass enamels.

– California Proposition 65.

- **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– GOST R ISO 7086-1- 2016 Glass hollowware in contact with food. Release of lead and cadmium. Part 1. Test method.

– GOST R ISO 6486-2007 Ceramic ware, glass-ceramic ware and glass dinnerware in contact with food. Release of lead and cadmium. Part 1. Test method.

V. B. 3. PRODUCT HEALTH REQUIREMENTS FOR KITCHENWARE PRODUCTS MADE OF UNCOATED METALS AND ALLOYS

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V. B. 3. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF KITCHENWARE PRODUCTS MADE OF UNCOATED METALS AND ALLOYS

To comply with Inditex requirements, the Supplier shall review all the positive lists that are applicable to food contact materials made of metals and alloys included in Annex I and meet the composition requirements enclosed in Annex II of this Standard. Metals and alloys which are not compliant with both the applicable positive lists and the composition requirements shall not be used in the manufacture of kitchenware products made of metals and alloys.

V. B. 3. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the overall migration as specified in the following table according to the type of metal and/or alloy used:

Material	Inditex Limit	Test conditions[348]	Method
METALS & ALLOYS (other than stainless steel)	60 mg/kg	10 % EtOH, 3 % HOAc and vegetal oil; 3rd migration extract	EN 1186
STAINLESS STEEL (except cutting items)	50 mg/kg	3 % HOAc; 3rd migration extract	IT[349]
STAINLESS STEEL (cutting items)	8 mg/dm^2		

V. B. 3. 3. HEAVY METALS MIGRATION & COMPOSITION

1. Metal content

a) General requirements for all types of metals and alloys

Content limits of impurities of metals and alloys	
Metals	**max (%)**
Pb	0.01
As	0.01
Hg	0.01
Cd	0.01[350]
Co	0.05[351]
Sum of (Sb+As+Cd+Cu+Hg+Pb)	1

b) Additional requirements for aluminium and aluminium alloys

Chemical composition of ALUMINIUM and ALUMINIUM ALLOY		
Metals	**Aluminium max** (%)	**Aluminium Alloy max** (%)
Fe	Total: 1.0	2.0
Si		13.5
Cr	0.10	0.35
Mn	0.10	4.0

Continued on next page

348 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.
349 Use the appropriate Italian method according to the Ministerial Decree of 21 March 1973 and its amendments (Chapter VI – Art. 37).
350 Only for articles made of steel, cast iron, tin and tin alloys, zinc and zinc alloys, and copper and copper alloys.
351 Only for metallic coatings of articles made of steel or stainless steel.

Chemical composition of ALUMINIUM and ALUMINIUM ALLOY		
Metals	**Aluminium max** (%)	**Aluminium Alloy max** (%)
Mg	0.10	11[352]
Ni	0.10	3.0
Zn	0.10	0.25
Ti	0.10	0.3
Sn	0.10	0.10
Cu	0.10	0.6[353]
Sb	0.10	0.2
Zr	0.10	0.3
Sr	0.10	0.2
As	0.10	0.05
Ta	0.10	0.05
Pb	0.05	0.05
Tl	0.05	0.05
Be	0.05	0.05
Sum of (As + Ta + Be + Tl + Pb)	-	≤ 0.15 %
All	> 99 %	Predominate

2. Metal migration

Material	Method
Stainless Steel	EU test method and GB 4806.9 with reference to GB 31604.49 (Part 2)
Aluminium	EU test method and GB 4806.9 with reference to GB 31604.49 (Part 2)
Other metal or alloy	EU Test Method

– For all types of substrates: to show compliance with Inditex requirements, it is required to check conformity following the guidelines of the EU Test Method (Metals and alloys used in FCM and articles. Practical Guide. 1st edition, 2013). The migrations measured must be below the limits shown in the Metal and alloys column of the table A - Requirements for kitchenware products made of metals and alloys.

– Additionally, for metallic articles it is required to check conformity with requirements show in table B of this section.

– For articles made of Aluminium or Stainless Steel: in addition to the test described in the previous paragraph, it is required to check conformity following the provisions of the Chinese method [GB 31604.49 (Part 2)]. The migrations measured must be below the limits shown in the appropriate Aluminium or Stainless Steel columns of the table A - Requirements for kitchenware products made of metals and alloys.

– Metallic articles (stainless steel, aluminium and other metal and alloys) whose surface is treated with an organic coating shall comply with the requirements given in section V. B. 5

– Metallic articles (stainless steel, aluminium and other metal and alloys) manufactured with a glazed surface finish (*i.e.* porcelain enamel) shall comply with the requirements given in section V. B. 6

352 The limit of Mg is 5 % when used for pressure resistant parts in pressure cooking articles.
353 The copper content (Cu) can reach up to 6 % for articles intended for short-term contact, such as coffee makers or plates.

Table A- Requirements for kitchenware products made of metals and alloys				
	Metals and alloys		Aluminium	Stainless Steel
Migration test	1st + 2nd	3rd	3rd	3rd
Units	mg/kg	mg/kg	mg/kg	mg/kg
Aluminium (Al)	35	2 mg/L		
Antimony (Sb)	0.28	0.04		
Arsenic (As)	0.014	0.002	0.04	0.04
Barium (Ba)	8.4	1.2		
Beryllium (Be)	0.07	0.01		
Bismuth (Bi)		1		
Cadmium (Cd)	0.035	0.005	0.02	0.02
Chromium (Cr)	1.75	0.1[354]		2.0[355]
Cobalt (Co)	0.14	0.02		
Copper (Cu)	28	4		
Iron (Fe)	280	40		
Lead (Pb)	0.07	0.01	0.2	0.05
Lithium (Li)	0.336	0.048		
Manganese (Mn)	12.6	0.6[356]		
Mercury (Hg)	0.021	0.003		
Molybdenum (Mo)	0.84	0.12		
Nickel (Ni)	0.98	0.07 mg/L		0.5
Silver (Ag)	0.56	0.08		
Thallium (Tl)	0.0007	0.0001		
Tin (Sn)	700	100		
Vanadium (V)	0.07	0.01		
Zinc (Zn)	35	5		
Zirconium (Zr)		2		
Method	Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013		GB 4806.9 with reference to GB 31604.49 (Part 2)	
Test conditions[357]	Citric acid 5 g/L[358]		4 % HOAc; Boil 30 min and place at room temperature for 24 h	

354 Limit for articles made of cast iron with organic coating = 0.1 mg/kg. Chromium VI: nd (0.005 mg/dm^2).
355 This requirement does not apply to articles made of martensitic stainless steel. See Annex II.
356 Limit for Stainless Steel = 0.1 mg/kg.
357 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.
358 Kitchenware products intended to come into contact with all types of food stuff shall be analysed in the food simulant specified herein. Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.

Table B- Additional requirements for kitchenware products made of metals and alloys					
	Steel and steel alloys	Aluminium and aluminium alloys	Cast iron	Brass	Others[359]
Units	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum (Al)	0.500	0.500		0.500	0.500
Antimony (Sb)				2.000	2.000[360]
Arsenic (As)					0.050
Beryllium (Be)					0.0002
Chromium (Cr III+Cr VI)	0.100		0.100		0.100
Copper (Cu)	1.000	1.000	1.000	1.000	1.000
Iron (Fe)	0.300	0.300	0.300	0.300	0.300
Lead (Pb)				0.030	0.030
Manganese (Mn)	0.100	0.100		0.100	0.100
Molybdenum (Mo)	0.250				0.250
Niobium (Nb)					0.010
Nickel (Ni)	0.100		0.100	0.100	0.100
Silicium (Si)	10.000	10.000		10.000	10.000
Tin (Sn)	0.100				0.100
Titanium (Ti)		0.100			0.100
Tungsten (W)	0.050				0.050
Vanadium (V)	0.100	0.100			0.100
Zinc (Zn)		1.000		1.000	1.000
Method	Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16."				
Test conditions	2 % HOAc + 2 % NaCl				

V. B. 3. 4. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Parameter	Limit	Units	Method
Sensory Test	≤2.5[361]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

359 Copper, titanium, iron-nickelalloys, bronze-tinalloys, copper-nickelalloys, nickelalloys, and titanium alloys.
360 The limit for kitchenware articles made of copper is 0.050 mg/L.
361 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

V. B. 3. 5. ADDITIONAL CONSIDERATIONS

In case the surface in contact with food of the article made of metal is modified by treatment with a material different from metal, the article should also be compliant with the requirements specified in section V. B. 5 and / or section V. B. 6.

V. B. 3. 6. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to become in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to become in contact with food and its amendments.

– Resolution CM/ResAP(2013) on metals and alloys used in food contact materials and articles.

– Commission Regulation (EC) No. 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.

– Technical Guide on Metals and alloys used in food contact materials, Council of Europe, European Directorate for the Quality of Medicines & Healthcare.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

- **French regulation:**

– Décret 92-631.

– Décret 2007-766.

– Recommendation DGCCRF 2004–64 and its amendments (DM/4B/COM/001).

- **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

– Ministerial Decree 195 of 6 August 2015.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.9-2016 National Food Safety Standard for Food Contact Metal Materials and Article.

- **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

- **United States of America regulation:**

– US Engineering Standards for Cookware & Bake ware of Cookware Manufacture Association (CMA).

- **Korean regulation:**

– "Standards and Specifications for Food Utensils, Containers and Packages" (2019) and its amendments.

- **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. B. 4. PRODUCT HEALTH REQUIREMENTS FOR KITCHENWARE PRODUCTS MADE OF NATURAL WOOD

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V. B. 4. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF KITCHENWARE PRODUCTS MADE OF NATURAL WOOD

To comply with Inditex' requirements, the Supplier must review all the positive lists included in Annex I of this Standard. Substances that are not mentioned in all the positive lists should not be used to manufacture kitchenware products. The acceptable limits for approved components are specified in the mentioned positive lists.

In addition, if a natural coating[362] (*i.e.* wax or oil) is applied on the kitchenware surface, it shall be compliant with the positive list included in Annex II of this Standard.

V. B. 4. 2. HEAVY METALS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter		Limit	Units	Test conditions[363]	Method
NATURAL WOOD[361] (uncoated)	Metal content	Pb	3	mg/kg wood	Water; rt, 24 h or 80ºC, 2 h[364]	EN 645 or EN 647[365] followed by EN 12498
		Cd	0.5	mg/kg wood		
		Hg	0.3	mg/kg wood		EN 645 or EN 647[365] followed by EN 12497
		As	Absent[366]	mg/kg wood	–	Acid digestion- ICP
	Metal migration	Pb	1	mg/L	3 % HOAc	EN 13130 followed by ICP-MS
		As	0.01	mg/kg		
		B	1	mg/kg		
		Cr	0.1	mg/kg		
		Cu	5	mg/kg		
		Mn	0.5	mg/kg		

V. B. 4. 3. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Parameter	Limit	Units	Method
Sensory Test	≤ 2.5[367]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

362 See definition in Annex III.
363 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type unless otherwise specified in this section.
364 For kitchenware articles intended to be used at room temperature (*i.e.* food storage or food preparation utensils for cold and ambient use): rt, 24 h.
For kitchenware articles intended to be used at high temperature (*i.e.* food preparation utensils for hot use or utensils used during cooking / frying / grilling): 80ºC, 2 h.
365 For kitchenware articles intended to be used at room temperature (*i.e.* food storage or food preparation utensils for cold and ambient use): the extraction stage shall be performed according to EN 645.
For kitchenware articles intended to be used at high temperature (*i.e.* food preparation utensils for hot use or utensils used during cooking / frying / grilling): the extraction stage shall be performed according to EN 647.
366 LOD (limit of detection): 2 mg/kg.
367 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

V. B. 4. 4. MICROORGANISMS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Material	Parameter	Limit	Units	Method
NATURAL WOOD[368] (uncoated)	Coliform	nd	MPN/50 cm^2	GB 4789.3
	Pathogenic bacteria	nd	- /50 cm^2	GB 4789.4-.5-.10-.11
	Mould	50	cfu/g	GB 4789.15

V. B. 4. 5. OTHER REGULATED SUBSTANCES AND PARAMETERS

To ensure compliance with Inditex requirements, the Supplier shall comply with the requirements specified in the following table:

Articles intended to be used in contact with all types of foodstuffs[369]					
Material	**Parameter**	**Limit**	**Units**	**Test conditions**[370]	**Method**
NATURAL WOOD (uncoated)[371]	Formaldehyde	3	mg/kg	3 % HOAc	ENCR-Formaldehyde[372]
		0.1	m/L	2 % HOAc + 2 % NaCl	EAEU[373]
	Pentachlorophenol (PCP) residues	0.1[374]	mg/kg	–	SN/T 2278 or NF B51-297
	Pentachlorophenol (PCP) migration	150	ng/kg	10 % EtOH 3 % HOAc; Vegetal oil	SN/T 2204
	Trichlorophenol migration	2000	ng/kg or ng/L		
	Polychlorinated biphenyls (PCB) residues	2	mg/kg wood	–	EN ISO 15318
	Sulphur dioxide	12.80	mg/L	Water	SK[375]
	Thiabendazole	1.80	mg/L	20 % EtOH	
	Ortho-phenylphenol	7.3	mg/L		
	Biphenyl	0.9	mg/L		
	Imazalil	0.6	mg/L		
	Colour, turbidity and sediment.	nd	–	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	Instr. No. 880-71

V. B. 4. 6. ADDITIONAL CONSIDERATIONS

If an organic coating[370] is applied on the kitchenware surface or a synthetic resin is used as an adhesive, please refer to section V. B. 5 of this Standard.

368 See definition in Annex III.
369 Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.
Kitchenware products intended to come into contact with non-fatty dry foodstuffs shall be tested according to the provisions established in section V. B. 7. 4.
370 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.
371 See definition in Annex III.
372 See protocol in section V. B. 8
373 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.")
374 Limit for bamboo articles: 0.15 mg/kg
375 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".

V. B. 4. 7. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

- **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

- **French regulation:**

– Note d'information n°2012-93.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 31. Test standard DIN 10955.

- **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1 -2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– SN/T 2278-2009 Food contact materials - Determination of pentachlorophenol in woody materials - GC/MS method.

– SN/T 2204-2008 "Food contact materials - Wood materials - Determination of pentachlorophenol in food simulants - GC/MS method".

- **Korean regulation:**

– "Standards and Specifications for Food Utensils, Containers and Packages" (2019) and its amendments.

- **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

- **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– CU TR 005/2011 on safety of packaging.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. B. 4. 8. SUMMARY

Test Item		Natural Wood
Metal Content	As	absent[376]
	Cd	0.5 mg/kg wood
	Hg	0.3 mg/kg wood
	Pb	3 mg/kg wood
Metal Migration	As	0.01 mg/kg
	B	1 mg/kg
	Cr	0.1 mg/kg
	Cu	5 mg/kg
	Mn	0.5 mg/kg
	Pb	1 mg/L
Sensory Test		≤ 2.5 / < 1
Coliform		nd
Pathogenic bacteria		nd
Mould		50 cfu/g
Formaldehyde		3.0 mg/kg food / 0.100 mg/L
Pentachlorophenol residues		0.10 mg/kg[377]
Pentachlorophenol migration		150 ng/kg
Polychlorinated biphenyls (PCB)		2 mg/kg
Trichlorophenol migration		2000 ng/kg or ng/L
Sulphur dioxide		12.8 mg/L
Thiabendazole		1.8 mg/L
Ortho-phenylphenol		7.3 mg/L
Biphenyl		0.9 mg/L
Imazalil		0.6 mg/L
Colour migration		nd
Turbidity and sediment		nd

376 LOD = 2 mg/kg.
377 Limit for bamboo articles: 0.15 mg/kg.

V. B. 5. PRODUCT HEALTH REQUIREMENTS FOR KITCHENWARE PRODUCTS WITH ORGANIC COATINGS

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V. B. 5. 1. ALLOWED SUBSTANCES IN THE MANUFACTURE OF KITCHENWARE PRODUCTS WITH ORGANIC COATINGS

To comply with Inditex requirements, the Supplier shall review all the positive lists applicable to organic coatings included in Annex I. Substances that are not mentioned in all the applicable positive lists shall not be used in the manufacture of kitchenware products with organic coatings. The acceptable limits for the approved components are specified in the mentioned positive lists.

V. B. 5. 2. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier should review the overall migration as specified in the following table according to the specific coating material:

Kitchenware products intended to be used in contact with all types of foodstuffs[378]				
Material	**Inditex Limit**	**Units**	**Test conditions[379]**	**Method**
CELLULOSE-ACETATE-BUTYRATE, PERCHLOROVINYL RESIN, PHENOLIC RESIN, PU, UPR, FLUOROCARBON RESIN, SILICONE and QUASI-CERAMIC COATINGS	30	mg/kg	(EN: 10 % EtOH; SK: water)	ENSK–OM or ENSK-OM-ST[380]
			4 % HOAc	GBSK–OM or GBSK-OM-ST[380]
		mg/L	n-heptane; 20 % EtOH	SK[381]
	60	mg/kg	Vegetable oil	EN 1186

In the case of ABS / AS, acrylic resin, PA, PE, PET / PETG, PLA, POM, PP and/ or PS coatings, the Supplier should review the overall migration requirements specified in section V. B. 1 of this Standard to ensure compliance.

For other type of coatings contact Inditex Sustainability Department.

V. B. 5. 3. SPECIFIC MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall review the specific migration of the substances specified in the following table according to the coating material:

Articles intended to be used in contact with all types of foodstuffs[382]				
Material	**Parameter**	**Limit**	**Test conditions[383]**	**Method**
PHENOLIC RESIN	Formaldehyde	4 mg/L	4 % HOAc	GBSK-Formaldehyde[384]
		0.100 mg/L	2 % HOAc + 2 % NaCl	EAEU[385]
	Phenol	3 mg/kg	4 % HOAc	GB 31604.46
		0.05 mg/L	2 % HOAc + 2 % NaCl	EAEU[385]

Continued on next page

378 Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested according to the provisions established in section V. B. 7. 4.
379 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.
380 Select protocols according to the relevant product type. See protocols in section V. B. 8.
381 Use the appropriate Korean methods according to the type of food contact material. “Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II”.
382 Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4. as reference.
383 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.
384 See protocol in section V. B. 8.
385 Use the appropriate Eurasian Economic Union method according to the “Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.”

Articles intended to be used in contact with all types of foodstuffs[382]				
Material	**Parameter**	**Limit**	**Test conditions[383]**	**Method**
POLYURETHANE	PAA	nd (0.01 mg/kg)	3 % HOAc	EN 13130; analysis by LC-MS/MS
	Isocyanates[386]	nd (0.01 mg/kg)[387]	10 % EtOH; 4 % HOAc; vegetal oil	EN13130
	Peroxide	nd (0.005 %)	–	LFGB[388]
	Ethylene glycol	1.000 mg/L (or 1.000 mg/m^3 [389])	2 % HOAc + 2 % NaCl; 3 % lactic acid; 20 % EtOH; Vegetable oil	EAEU [385]
	Acetaldehyde	0.200 (or 0.010 mg/ m^3 [389])		
	Formaldehyde	0.100 (or 0.003 mg/ m^3 [389])		
	Ethyl acetate	0.100 (or 0.100 mg/ m^3 [389])		
	Acetone	0.100 (or 0.350 mg/ m^3 [389])		
	Methyl alcohol	0.200 (or 0.500 mg/ m^3 [389])		
	Propyl alcohol	0.100 (or 0.300 mg/ m^3 [389])		
	Isopropyl alcohol	0.100 (or 0.600 mg/ m^3 [389])		
	Benzene	0.010 (or 0.100 mg/ m^3 [389])		
	Toluene	0.500 (or 0.600 mg/m^3 [389])		
UPR	Terephthalic acid	7.5 mg/kg	10 % EtOH; 4 % HOAc; vegetal oil	GB 31604.21 or EN 13130-2[390]
	Isophthalic acid	5.0 mg/kg		GB 31604.1 or EN 13130 [390]
	Methacrylic acid	6.0 mg/kg		GB 31604.29 or EN 13130 [390]
	VOM	25 mg/dm^2	–	LFGB
	Peroxides	nd	–	LFGB
FLUOROCARBON RESINS	F	0.2 mg/kg	10 % EtOH; 4 % HOAc; Vegetal oil	GB 31604.1 or EN 13130 [390]
	Cr (VI)	nd (0.01 mg/kg)		
	Tetrafluoroethylene	0.05 mg/kg		
	Hexafluoropropylene	0.01 mg/kg		

In the case of ABS / AS, acrylic resin, PA, PE, PET / PETG, PLA, POM, PP and / or PS coatings, the Supplier should review the specific migration requirements specified in section V. B. 1. 3 of this Standard to ensure compliance.

For other type of coatings contact Inditex Sustainability Department.

V. B. 5. 4. RESIDUAL SUBSTANCES

To ensure compliance with Inditex requirements, the Supplier shall review the residual amount of the substances specified in the following table according to the specific plastic material:

386 2,6-toluene diisocyanate (2,6 TDI); 2,4-toluene diisocyanate (2,4 TDI); diphenylmethane-4,4′-diisocyanate (MDI); hexamethylene diisocyanate (HMDI); cyclohexyl isocyanate; 1,5-naphthalene diisocyanate; diphenylmethane-2,4′-diisocyanate; 2,4-toluene diisocyanate dimer; Isophorone diisoyanate (IPDI); 3,3′-dimethyl-4,4′-diisocyanatobiphenyl; octadecyl isocyanate; diphenylether-4,4′-diisocyanate; dicyclohexylmethane-4,4′- diisocyanate and tetramethylxylene diisocyanate (TMXDI).

387 SML(T)= nd (0.01 mg/kg), expressed as isocyanate moiety. Nonetheless, verification fo compliance shall be performed by residual content per food contact surface area (*i.e.* QMA) in case of reaction with food simulant QMA= 1 mg/kg in final product, expressed as isocyanate moiety (applicable test method: GB31604.45).

388 58th Communication on the Testing of Plastics, Bundesgesundheitsblatt 40 (1997) 412.

389 This requirement applies to tableware in contact with non-fatty dry foodstuffs only.

390 For 4 % HOAc use the Chinese method; for 10 % EtOH and vegetable oil use the European method.

Material	Parameter	Limit	Method
UPR	Styrene	≤ 0.2 %	GB 31604.16
FLUOROCARBON RESINS	PFOS	nd (1 ppb)	GB 31604.35
	PFOA and its salts	nd (2 ppb)	

In the case of ABS / AS, acrylic resin, PA, PE, PET / PETG, PLA, POM, PP and / or PS coatings, the Supplier should review the residual substances requirements specified in section V. B. 1. 4 of this Standard to ensure compliance.

For other type of coatings contact Inditex Sustainability Department.

V. B. 5. 5. METALS

To ensure compliance with Inditex requirements, the Supplier shall review the metal migration requirements specified in the following tables according to the specific coating material:

Material	Parameter	Limit	Units	Method
ALL TYPES OF ORGANIC COATINGS[391] and QUASI-CERAMIC COATINGS	Al	1.00	mg/kg	GBEN-metals[392] (ICP-MS or ICP-OES analysis)
	Ba	1.00	mg/kg	
	Co	0.05	mg/kg	
	Cr (III)[393]	0.02	mg/dm^2	
	Cr (VI)[394]	nd (0.01)	mg/kg	
	Cu	5.00	mg/kg	
	Fe	48	mg/kg	
	Li	0.60	mg/kg	
	Mn	0.60	mg/kg	
	Ni	0.02	mg/kg	
	Sb	0.04	mg/kg	
	Sn	1.2	mg/kg	
	Zn	5.00	mg/kg	
	Ag, As, Bi, Cd, Hg, Mo and Pb	nd (0.01)	mg/kg	

V. B. 5. 6. POTASSIUM PERMANGANATE - $KMnO_4$ - CONSUMPTION

To ensure compliance with Inditex requirements, the Supplier shall review the potassium permanganate consumption as specified in the following table:

Material	Limit	Units	Test conditions	Method
ALL TYPES OF ORGANIC COATING MATERIALS[395] APPLIED ON FOOD STORAGE AND FOOD PREPARATION UTENSILS AND CONTAINERS	10	mg/kg	Water; 60ºC, 2 h	GB 31604.2
ALL TYPES OF ORGANIC COATING MATERIALS AND QUASI-CERAMIC COATINGS[395] APPLIED ON MICROWAVE MATERIALS FOR WARMING UP OR DEFROSTING, UTENSILS USED DURING COOKING, FRYING AND GRILLING, COOKWARE AND BAKEWARE			Water; 100ºC, 0.5 h followed by 24 h at rt	

391 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, fluorocarbon resin, silicone, ABS, AS, acrylic resin, PA, PE, PET/PETG, PLA, POM, PP and PS.
392 See protocol in section V. B. 8.
393 This parameter is only applicable to non-stick coatings produced using adhesion promoters.
394 This parameter is only applicable to fluorocarbon resins.
395 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, fluorocarbon resin, silicone, ABS, AS, acrylic resin, PA, PE, PET/PETG, PLA, POM, PP and PS.

V. B. 5. 7. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

To ensure compliance with Inditex requirements, the Supplier shall review all the parameters specified in the following table:

Material	Parameter	CAS No	Limit[396]	Secondary Limits
			mg/kg	mg/kg
ALL TYPES OF ORGANIC COATINGS[397] and QUASI-CERAMIC COATINGS	Benzo(a)pyrene	50-32-8	< 0.2	< 0.2
	Benzo(e)pyrene	192-97-2	< 0.2	< 0.2
	Benzo(a)anthracene	56-55-3	< 0.2	< 0.2
	Benzo(b)fluoranthene	205-99-2	< 0.2	< 0.2
	Benzo(j)fluoranthene	205-82-3	< 0.2	< 0.2
	Benzo(k)fluoranthene	207-08-9	< 0.2	< 0.2
	Chrysene	218-01-9	< 0.2	< 0.2
	Dibenzo(a,h)anthracene	53-70-3	< 0.2	< 0.2
	Benzo(ghi)perylene	191-24-2	< 0.2	< 0.2
	Indeno (1,2,3-cd)pyrene	193-39-5	< 0.2	< 0.2
	Phenanthrene	85-01-8	< 1 Sum	< 5 Sum
	Pyrene	129-00-0		
	Anthracene	120-12-7		
	Fluoranthene	206-44-0		
	Naphthalene	91-20-3	< 1	< 2
	Sum of 15 PAH	–	< 1	< 5

V. B. 5. 8. PRIMARY AROMATIC AMINES

To ensure compliance with Inditex requirements, the Supplier shall review the primary aromatic amines specific migration as specified in the following table:

Material	Limit	Test conditions[398]	Test Method
ALL TYPES OF ORGANIC COATINGS[399] and QUASI-CERAMIC COATINGS	nd[400]	3 % HOAc	EN13130-1:2004 and Kunststoffe im lebensmittelverkehr Book Teil B II XXI

396 If the limits are surpassed but the secondary limits are still met, the confirmation of suitability of the kitchenware product can be verified by an additional specific migration test of the PAH components according to EN 13130 test method followed by GC-MS analysis. To comply with Inditex requirements, PAHs shall not be detected in the 1st migration extract (LOD: 0.01 mg/kg (sum of PAHs). If applicable, the PAHs specific migration shall be determined using the following test conditions:

Food simulants: Kitchenware products intended to come into contact with all types of food stuffs shall be analysed in 10 % EtOH, 3 % HOAc and vegetal oil. Kitchenware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.

Contact time and temperature: See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.

397 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, fluorocarbon resin, silicone, ABS, AS, acrylic resin, PA, PE, PET/PETG, PLA, POM, PP and PS.

398 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.

399 Parameters applicable to all types of organic coatings including cellulose-acetate-butyrate copolymer, perchlorovinyl resin, phenolic resin, PU, UPR, fluorocarbon resin, silicone, ABS, AS, acrylic resin, PA, PE, PET/PETG, PLA, POM, PP and PS.

400 LOD (limit of detection): 0.01 mg/kg (sum of PAA).

V. B. 5. 9. SENSORY TEST

To ensure compliance with Inditex requirements, the Supplier shall perform the sensory test as specified in the following table:

Material	Limit	Units	Method
ALL TYPES OF ORGANIC COATINGS and QUASI-CERAMIC COATINGS	≤ 2.5[401]	Adimensional	DIN 10955
	≤ 1		Instr. No. 880-71

V. B. 5. 10. COLOR MIGRATION

To ensure compliance with Inditex requirements, the Supplier shall perform the colour migration test as specified in the following table:

Material	Parameter	Limit	Test Method
ALL TYPES OF ORGANIC COATINGS and QUASI-CERAMIC COATINGS	Color	No detection	Instr. No. 880-71
	Turbidity and sediment		

V. B. 5. 11. ADDITIONAL CONSIDERATIONS

In case the surface intended to be brought in contact with food is modified by treatment with a metallic coating, the Supplier shall review all the parameters specified in section V. B. 3 of this Standard to ensure compliance.

In case the surface intended to be brought in contact with food is coated with porcelain enamel, the Supplier shall review all the parameters specified in section V. B. 6 of this Standard to ensure compliance.

In case the surface intended to be brought in contact with food is coated with a "quasi-ceramic" non-stick coating (commonly named ceramic coatings or sol-gel non stick coatings), the Supplier shall comply with the specifications provided in this chapter.

V. B. 5. 12. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 10/2011 of 14th January 2011 on plastic materials and articles intended to become into contact with food and its amendments.

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Partial Agreement in the Social and Public Health Field 2004 "Coatings intended to come into contact with foodstuffs".

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

– BfR XII. Unsaturated Polyester Resins.

– BfR XXXIX. Commodities Based on Polyurethanes.

401 Intensity scale:
0- no perceptible deviation
1- deviation just perceptible
2- moderate deviation
3- distinct deviation
4- large deviation

– BfR LI. Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils.

• **French regulation:**

– Decree No. 92-631 and its amendments.

– Decree No. 2007-766 and its amendments.

• **Italian regulation:**

– Ministerial Decree of 21 March 1973 (Italian Official Gazette 26.4.85) and its amendments.

• **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

• **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.10-2016 National Food Safety Standard for Paint and Coating Intended to Come into Contact with Food.

– GB 9685-2016 National Food Safety Standard for Uses of Additives in Food Contact Materials and Their Products.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **USA regulation:**

– 21 CFR 175.300 “Resinous and polymeric coatings”.

• **Korean regulation:**

– “Standards and Specifications for Food Utensils, Containers and Packages” (2019) and its amendments.

• **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 “Maximum admissible amounts of chemical substances, emitting from food contact materials”.

V. B. 6. PRODUCT HEALTH REQUIREMENTS FOR KITCHENWARE PRODUCTS COATED WITH PORCELAIN ENAMEL AND OTHER INORGANIC COATINGS

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V. B. 6. 1. OVERALL MIGRATION

To ensure compliance with Inditex requirements, the Supplier should review the overall migration as specified in the following table:

Overall Migration			
Material	**Inditex Limit**	**Test conditions[402]**	**Method**
PORCELAIN ENAMEL	60 mg/kg	3 % HOAc, 3rd migration extract	EN 1186

V. B. 6. 2. LEAD, CADMIUM & OTHER HEAVY METALS

To ensure compliance with Inditex requirements, the Supplier should review the migration of heavy metals as specified in the tables enclosed in parts 1 and 2 of this section.

- Enamelled kitchenware products, other than cookware and bakeware, shall be tested following the test methods **ITX-EN ISO 4531** and **EAEU method.**

  a) The ITX-EN ISO 4531 test method is based on the standard EN ISO 4531. Nevertheless, according to Inditex requirements three successive extractions must be performed using the following test conditions:

  – 1st migration extract shall be obtained by exposing the kitchenware article to 4 % HOAc at 22ºC for 24 h.

  – The 2nd and 3rd migration extract shall be obtained by exposing the kitchenware article to 4 % HOAc at 40ºC for 24 h.

  Finally, both the 1st and 3rd migration extracts will be analysed.

  b) According to **EAEU method** 1st migration extract shall be obtained by exposing the kitchenware article to 2 % HOAc + 2 % NaCl at time and temperature conditions depending on the article.

- Enamelled cookware and bakeware articles shall be tested according to **EN 1388-1/2, ISOEN-Metals** and **EAEU methods**:

  – **EN 1388-1/2:** 1st migration extract shall be obtained and tested according to the EN 1388-1/2 test method.

  – **ISOEN-Metals[403]:** this protocol is based on the standards EN ISO 4531 and EN 1388-1/2. In the first stage 3rd migration extract shall be obtained and tested according to the EN ISO 4531 using the test conditions and instructions specificated in the section V. B. 8 to ensure compliance.

  – **EAEU method:** 1st migration extract shall be obtained by exposing the kitchenware article to 2 % HOAc + 2 % NaCl at time and temperature conditions depending on the article.

Analysis method: all the metals will be analysed by AAS (Atomic Absorption spectrophotometry), ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrophotometry) or ICP-MS (Inductively Coupled Plasma - Mass Spectrometry); except Cr (VI), by diphenylcarbazide colorimetry according to NF T 90-043 or any other equivalent method.

402 See technical guidelines for compliance testing in section V. B. 7 for selecting the appropriate time and temperature test conditions according to the relevant product type.
403 See protocol in section V. B. 8.

1. First migration limits

Type of Product[404]			Parameter	Limit	Units	Test conditions	Method
Food preparation ware and food storage	Cat. 1	Flatware (depth < 25 mm)	Pb	0.8	mg/dm²	4 % HOAc; 22ºC, 24 h	ITX- EN ISO 4531[405]
			Cd	0.07	mg/dm²		
			Cr (VI)	0.005	mg/dm²		
			Sb	0.1	mg/dm²		
	Cat. 2	Small Hollowware (depth > 25 mm) (< 1.1 L)	Pb	0.8	mg/L		
			Cd	0.07	mg/L		
			Cr (VI)	0.03	mg/L		
			Sb	0.1	mg/L		
	Cat. 2	Large Hollowware (depth > 25 mm) (1.1-3 L)	Pb	0.8	mg/L		
			Cd	0.07	mg/L		
			Cr (VI)	0.03	mg/L		
			Sb	0.1	mg/L		
	Cat. 3	Large Hollowware (depth > 25 mm) (> 3 L)	Pb	0.1	mg/dm²		
			Cd	0.1	mg/L		
			Cr (VI)	0.03	mg/L		
			Sb	0.1	mg/dm²		
	Cat. 3	Pitchers (> 3 L)	Pb	0.1	mg/dm²		
			Cd	0.1	mg/L		
			Cr (VI)	0.03	mg/L		
			Sb	0.1	mg/dm²		
COOKWARE (including microwave and bakeware)	Cat.1	Flatware (depth < 25 mm)	Pb	0.1	mg/dm²	4 % HOAc; 22ºC, 24 h	EN 1388-1/2
			Cd	0.1	mg/L		
			Cr (VI)	0.03	mg/L		
			Sb	0.1	mg/dm²		
	Cat. 2 and Cat. 3	Hollowware (depth > 25 mm)	Pb	0.4	mg/L		
			Cd	0.07	mg/L		
			Cr (VI)	0.03	mg/L		
			Sb	0.1	mg/L		

404 See product type definition in Annex III and/or in the regulations mentioned in section V. B. 6. 4 of this Standard.
405 See protocol in section V. B. 8.

Additional requirements for kitchenware products with porcelain enamel					
Type of products	**Parameter**	**Limit**	**Unit**	**Simulant**	**Method**
PORCELAIN ENAMEL (All type of kitchenware products)	Al	0.500	mg/L	2 % HOAc + 2 % NaCl	EAEU[406]
	As	0.050			
	B	0.500			
	Co	0.100			
	Cr (III) and Cr (VI)	0.100			
	Fe	0.300			
	Mn	0.100			
	Ni	0.100			
	Ti	1.000			
	Zn	1.000			
	Pb	0.030			

2. Third migration limits

Type of Product	Parameter	Limit (mg/L)	Test conditions	Method
ALL TYPES OF ENAMELED KITCHENWARE (other than cookware, microwave and bakeware)	Al	1	4 % HOAc; 40ºC, 24 h	ITX- EN ISO 4531
	Ag	0.080		
	As	0.002		
	B	1		
	Ba	1		
	Cd	0.005		
	Co	0.02		
	Cr	0.1		
	Cu	1		
	Hg	0.005		
	Li	0.6		
	Mn	0.6		
	Mo	0.120		
	Ni	0.14		
	Pb	0.01		
	Sb	0.04		
	Se	0.01		
	Sr	1		
	Rb	1		
	V	0.01		
	Zn	7		

Continued on next page

406 Use the appropriate Eurasian Economic Union method according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.".

Type of Product	Parameter	Limit (mg/L)	Test conditions	Method
ENAMELED COOKWARE (including microwave) **and BAKEWARE**	Al	1	3 % HOAc; 95ºC, 2 h	ISOEN- Metals[407]
	Ag	0.080		
	As	0.002		
	B	1		
	Ba	1		
	Cd	0.005		
	Co	0.02		
	Cr	0.1		
	Cu	1		
	Hg	0.005		
	Li	0.6		
	Mn	0.6		
	Mo	0.120		
	Ni	0.14		
	Pb	0.01		
	Sb	0.04		
	Se	0.01		
	Sr	1		
	Rb	1		
	V	0.01		
	Zn	7		

V. B. 6. 3. ADDITIONAL CONSIDERATIONS

In case the surface intended to be brought in contact with food is modified by treatment with a metallic coating, the Supplier shall review all the parameters specified in section V. B. 3 of this Standard to ensure compliance.

In case the surface intended to be brought in contact with food is coated with a "quasi-ceramic" non-stick coating[408] (commonly named ceramic coatings or sol-gel non stick coatings), the Supplier shall review all comply with the specifications provided for organic coatings in the section V. B. 5 (except sections V. B. 5. 3 and V. B. 5. 4).

V. B. 6. 4. APPLICABLE REGULATIONS

- **European regulation:**

– Commission Regulation (EC) 1935/2004 of the European Parliament council of 27th October 2004 on materials and articles intended to come in contact with food and its amendments.

– Commission Regulation (EC) 2023/2006 of 22nd December 2006 on Good Manufacturing Practices for materials and articles intended to come in contact with food and its amendments.

– Council Directive of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs (84/500/EEC) and its amendment (2005/31/EC).

– EN ISO 4531 Vitreous and porcelain enamels — Release from enamelled articles in contact with food — Methods of test and limits.

- **German regulation:**

– German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31.

407 See protocol in section V. B. 8.
408 See definition in Annex III.

• **French regulation:**

– Decree No. 92-631 and its amendments.

– Decree No. 2007-766 and its amendments.

– Recommendation DGCCRF 2004-64 and its amendments (DM/4B/COM/002).

• **Dutch Regulation:**

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [Warenwetregeling verpakkingen en gebruiksartikelen] and its amendments.

• **Chinese regulation:**

– GB 31603-2015 National Food Safety Standard for General Hygienic Practice for Production of Food Contact Materials and Products.

– GB 4806.1-2016 National Food Safety Standard for General Safety Requirements for Food Contact Materials and Their Products.

– GB 31604.1-2015 National Food Safety Standard on General Rules for Migration Test of Food Contact Materials and Their Products.

– GB 5009.156-2016 National Food Safety Standard on General Rules for Pre-treatment Method of Migration Test of Food Contact Materials and Their Products.

– GB 4806.3-2016 National Food Safety Standard for Enamelware.

• **Japanese regulation:**

– Ministry of Health and Welfare Notice No. 370 with its amendments, specifications and standards for foods, food additives, etc. under The Food Sanitation Act.

• **Korean regulation:**

– "Standards and Specifications for Food Utensils, Containers and Packages" (2019) and its amendments.

• **Eurasian Economic Union**

– Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.

– Instructions N 880-71 Instruction for the sanitary-chemical studies of products made of plastics and other synthetic materials intended for contact with food.

– GN 2.3.3.972-00 "Maximum admissible amounts of chemical substances, emitting from food contact materials".

V. B. 7. TECHNICAL GUIDELINES FOR PRODUCT HEALTH COMPLIANCE TESTING OF KITCHENWARE PRODUCTS

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V. B. 7. 1. INTRODUCTION

This section includes a comprehensive guideline on the applicable testing conditions that are to be taken into account when selecting the suitable migration test to be performed.

Part V. B. 7. 2 of this section encloses a table that illustrates the different types of kitchenware that are considered in this Standard. This table provides also a non-exhaustive list of types of articles according to the relevant kitchenware type. In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in part V. B. 7. 2, contact Inditex Sustainability Department.

Section V. B. 7. 3 consists of several tables that present, depending on the test method, the relevant time and temperature testing conditions to be selected for each type of kitchenware product. The proposed testing conditions are based on the foreseeable worst case use of the article (*i.e.* contact time and contact temperature).

Finally, section V. B. 7. 4 provides the guidelines to select the adequate food simulants that the Supplier shall select for the demonstration of compliance depending on the type of product and the type of foodstuffs that are foreseen to become in contact with the kitchenware.

V. B. 7. 2. PRODUCT TYPE EXAMPLES

Product type		Examples
Food storage intended to be brought in contact with all types of foodstuffs (cold, and ambient use)		Sealing rings for cans, jars, bottles, boxes, containers, etc. intended for food storage (including beverages); cans, jars, bottles, boxes, containers, etc. intended for food storage (including beverages); lunchboxes; ice-cube trays; etc.
Food storage intended to be brought in contact with non-fatty dry foodstuffs (cold and ambient use)		Containers for salt, sugar (crystal or powder), pepper and herbs; spice mills; containers for dry pasta, unprocessed cereals and cereals flour; flour stiffer; containers for coffee and tea; fruit bowls and baskets intended to be brought only with unpeeled and uncut fruits; etc.
Food storage intended to be brought in contact with specific foodstuffs (cold, and ambient use)		Bread box; biscuit box; onion / garlic keepers; cheese cellar; butter cellar; etc.
Food preparation utensils (cold, ambient use)	**Utensils for short time contact**	Rolling pin; lattice cutter; grater; garlic press; zester; vegetable peeler; apple peeler, cutter and/or corer; food scales; biscuit press; flour sifter; herb chopper; squeezer; pastry blender; mortar and pestle; roller docker; pasta cutter; salad spinner; julienne peeler; ravioli maker; vegetable cutter with container; hamburger press; meat grinder; cocktail shaker; ice cream scoop; etc.
Food preparation utensils (cold, ambient and hot use)[409]	**Utensils for short time contact**	Pastry spatula; knives; pastry scraper; pastry brush; pastry bag, pastry mat, salad/omelette/fitness shaker; whisk; funnel; potatoes slicer; dessert/appetizers rings; measuring spoon; measuring cup; tea net; food mill, chocolate thermometer, chocolate forms; etc.
	Other than short time contact	Cutting boards (not for storage); colander; drum sieve; chinois; gravy strainer; cooling rack; bowls; puree masher; potato masher; tongs-not foreseeable use at temperatures above 100ºC; etc.
Food preparation utensils used during cooking/frying/grilling		Spoon; ladle; spatula; tongs; etc.
Microwave materials for warming up or defrosting		Lunchbox; storage box and container intended to be used for microwave heating
Cookware	**Cookware (including microwave cookware)**	Pot; pan; pressure cooker, microwave cooker.
	Cooking items	Steamer basket; lids (sold alone); boil over preventer, frying pan splatter screens, fondue forks, cooking rings, etc.
Bakeware and ovenware		Cake pan; gratin dish; cookie sheet; muffin pan; cooking tray, oven liners; etc.

409 'Hot use' means hot fill and/or heating up to a temperature T where 70ºC ≤ T ≤ 100ºC for a maximum of time of $t = 120/2^{[(T-70)/10]}$ (*i.e.* 2 h (at T=70ºC) ≤ t ≤ 15 min (at T=100ºC).

(Hot fill means: the filling of any article with a food with a temperature not exceeding 100ºC at the moment of filling, after which the food cools down to 50ºC or below within 60 minutes, or to 30ºC or below within 150 minutes).

V. B. 7. 3. TIME AND TEMPERATURE TEST CONDITIONS ACCORDING TO THE PRODUCT TYPE

This part includes a comprehensive guideline on the applicable time and temperature test conditions that are to be taken into account when selecting the suitable migration tests to be performed. Please note that if your product can be clustered in more than one product type according to section V. B. 7. 2, the following provisions may reduce the number of analysis to be performed:

– If a kitchenware product shall be tested using the test conditions applicable to bakeware and ovenware, there is no need of analyzing the kitchenware article according to other test conditions.

– If a product is tested using the test conditions applicable to cookware, cooking items and utensils or to microwave materials for warming up or defrosting, there is no need of analyzing the article according to the food storage or food preparation utensils test conditions.

– If a product is tested using the test conditions applicable to food storage, there is no need of analyzing the kitchenware article according to the food preparation utensils test conditions.

Test conditions to be used in the following test methods:
- **EN 1186;**
- **EN 13130 and its parts;**
- **IT (unless otherwise specified);**
- **Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013**
- **GB 31604.1, .8, .7, .12, .15, .17, .19, .21, .29, .43, .44, .46, and .48;**
- **SN/T 2204; and**
- **INDITEX protocols' stages based on the aforementioned test methods.**

Product type	Food simulant				Test conditions	
	10 % EtOH	3 % or 4 % HOAc[410]	50 % EtOH	Vegetal oil	Specific migration	Overall migration
Food storage intended for cold, ambient and hot use[411]	✓	✓	✓	✓	100ºC (or reflux), 2 h[412]	100ºC (or reflux), 2 h[413]
Food preparation utensils for cold and ambient use and for short time contact	✓	✓	✓	✓	40ºC, 0.5 h[413]	40ºC, 0.5 h[413]
Food preparation utensils for cold, ambient and hot use and for short time contact[411]	✓	✓	✓	✓	70ºC, 0.5 h	70ºC, 2 h
Food preparation utensils for cold, ambient and hot use, other than short time contact[411]	✓	✓	✓	✓	70ºC, 2 h	
Microwave materials for warming up or defrosting	✓	✓	✓		100ºC (or reflux), 2 h	100ºC (or reflux), 2 h
				✓	121ºC, 0.5 h	100ºC, 2 h or 121ºC, 1 h

Continued on next page

410 3 % HOAc for the EN 1186 and the EN 13130 (and its parts) test methods and 4 % for the GB 31604.1, .8, .7, .9, .12, .17, .19, .21, .29, .43, .44, .48 test methods.

411 'Hot use' means hot fill and/or heating up to a temperature T where 70ºC ≤ T ≤ 100ºC for a maximum of time of $t = 120/2^{[(T-70)/10]}$ (*i.e.* 2 h (at T=70ºC) ≤ t ≤ 15 min (at T=100ºC).

(Hot fill means: the filling of any article with a food with a temperature not exceeding 100°C at the moment of filling, after which the food cools down to 50ºC or below within 60 minutes, or to 30°C or below within 150 minutes).

412 If the specific migration limit is surpassed, the confirmation of suitability of the kitchenware product shall be verified by additional specific migration test performed at 40ºC for 10 days or, in case that kitchenware product is intended for:
– long term storage up to 6 months at cold or ambient use (e.g. honey dispensers, oil and vinegar cruets, etc.), it shall be analysed at 50ºC for 10 days.
– cold use only (e.g. ice cube trays), it shall be analysed at 20ºC for 10 days.

413 If the overall migration limit is surpassed, the confirmation of suitability of the kitchenware product shall be verified by additional overall migration tests performed at 40ºC for 10 days or, in case of kitchenware product for cold use only (e.g. ice cube trays), at 20ºC for 10 days.

Test conditions to be used in the following test methods:

- **EN 1186;**
- **EN 13130 and its parts;**
- **IT (unless otherwise specified);**
- **Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013**
- **GB 31604.1, .8, .7, .12, .15, .17, .19, .21, .29, .43, .44, .46, and .48;**
- **SN/T 2204; and**
- **INDITEX protocols' stages based on the aforementioned test methods.**

Product type	Food simulant				Test conditions	
	10 % EtOH	3 % or 4 % HOAc[410]	50 % EtOH	Vegetal oil	Specific migration	Overall migration
Food preparation utensils used during cooking/frying/grilling	✓	✓	✓		100ºC (or reflux), 2 h	100ºC (or reflux), 4 h
Cookware (including microwave cookware) Cooking items				✓	175ºC, 0.5 h	175ºC, 2 h
Bakeware and ovenware[414]	✓	✓	✓		100ºC (or reflux), 4 h	
				✓	200ºC, 1 h	175ºC, 2 h

Test conditions to be used for SK test methods and for INDITEX protocol' stages based on SK test methods

Product type	Food simulant				Test conditions	
	Water	4 % HOAc	20 % EtOH	n-heptane	Specific migration	Overall migration
Food storage intended to be brought in contact with non-fatty dry foodstuffs (cold and ambient use)	✓				70ºC, 30 min	
Food storage intended to be brought in contact with all types of foodstuffs (cold, ambient and hot use)	✓	✓	✓		70ºC, 30 min	
Food storage intended to be brought in contact with specific foodstuffs (cold, and ambient use) Food preparation utensils for cold and ambient use and for short time contact Food preparation utensils for cold, ambient and hot use and for short time contact Food preparation utensils for cold, ambient and hot use, other than short time contact				✓	25ºC, 1 h	
Food preparation utensils used during cooking/frying/grilling	✓	✓			100ºC, 30 min	
Microwave materials for warming up or defrosting Cookware (including microwave cookware) Cooking items			✓		70ºC, 30 min	
Bakeware and ovenware				✓	25ºC, 1 h	

414 Bakeware and ovenware test conditions are not applicable to polyolefins.

Test conditions to be used for PLA specific migration according to JP 370	
Product type	**Test conditions**
Food storage intended to be brought in contact with all types of foodstuffs (cold, ambient and hot use) Food storage intended to be brought in contact with specific foodstuffs (cold, and ambient use) Food storage intended to be brought in contact with non-fatty dry foodstuffs (cold and ambient use) Food preparation utensils for cold and ambient use and for short time contact Food preparation utensils for cold, ambient and hot use and for short time contact Food preparation utensils for cold, ambient and hot use, other than short time contact	Water, 60ºC, 30 min
Food preparation utensils used during cooking/frying/grilling Microwave materials for warming up or defrosting Cookware (including microwave cookware) Cooking items Bakeware and ovenware	Water, 95ºC, 30 min

Test conditions to be used in the EAEU test methods	
Product type	**Test conditions**
	Specific migration
Food preparation utensils for cold and/or ambient use for short term contact (< 10 min)	22ºC, 2 h
Food preparation utensils for cold and/or ambient use for short term contact (< 2 min)	22ºC, 24 h
Food storage intended for cold and/or ambient use	22ºC, 72 h or 10 days[415]
Food preparation utensils for cold, ambient, and/or hot use for a maximum time of 10 min	Hot fill at 80ºC, kept at room temperature during 2 h.
Food preparation utensils for cold, ambient, and/or hot use for a maximum time of 2 h	Hot fill at 80ºC, kept at room temperature during 24 h.
Food preparation utensils for cold, ambient, and/or hot use for long term contact (including food storage)	Hot fill at 80ºC, kept at room temperature during 72 h or 10 days[415]

415 72 h: If food storage is up to 2 days; 10 days: if food storage is more than 2 days.

V. B. 7. 4. SELECTION OF FOOD SIMULANTS ACCORDING TO THE PRODUCT TYPE

This part provides the guidelines to select the adequate food simulants to be used for the demonstration of compliance of kitchenware products. If the article is intended to be used in contact with all types of foods, the Supplier shall follow the specifications established across sections V. B. 1 to V. B. 6 of this Standard. On the other hand, if the article is intended to be used only in contact with a single type of food or specific groups of foods, it shall be tested only in the food simulant(s) that correspond to the relevant food category that is foreseen to be brought in contact with the article.

Point 1 of this part encloses a table that illustrates a non exhaustive list of types of kitchenware products intended to be used only in contact with specific types of foodstuffs and some examples of these type of products. In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

Points 2 to 6 of this part include several tables that assign the adequate food simulant and test method for the relevant product type, depending o the type of foodstuff that is foreseeable to become in contact with the kitchenware product.

1. Kitchenware products intended to be used in contact with a single type of food or specific groups of foods: examples

Product type	Examples
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	Food storage intended to be brought in contact with non-fatty dry foodstuffs.
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Bread box; biscuit box; cheese cellar; cheese grater; butter cellar; chocolate thermometer; chocolate forms; food preparation utensils intended to be brought in contact with fresh pastry, biscuits, cakes, bread, …; etc.
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	Onion and garlic keeper; garlic press; zester; potatoe, fruit and/or vegetable peelers; fruit and vegetable cutters, corers and/or garnishing sets; citrus squeezer; salad spinner; julienne peeler; herb chopper; etc.
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	Egg slicer
Kitchenware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	Milk frother; milk frothing jug; etc.
Kitchenware intended only to be brought in contact with meat and processed meat products	Hamburger press; meat grinder; etc.

2. Kitchenware products made of plastic: food simulants assignment

OVERALL MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[416]	**Inditex' limit**	**Food simulant**	**Test method**
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	30 mg/L	Water	SK[417]

Continued on next page

416 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

417 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".

OVERALL MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[416]	**Inditex' limit**	**Food simulant**	**Test method**
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	60 mg/kg	Vegetal oil	EN 1186 or ENEN-OM-ST[418]
	30 or 240 mg/L[419]	n-heptane	SK[417]
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM or ENSK-OM-ST[418]
	30 mg/kg	4 % HOAc	GBSK-OM or GBSK-OM-ST[418]
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	30 mg/kg	50 % EtOH	ENSK-OM or ENSK-OM-ST[418]
Kitchenware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	30 mg/kg		
Kitchenware intended only to be brought in contact with meat and processed meat products	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM or ENSK-OM-ST[418]
	60 mg/kg	Vegetal oil	EN 1186 or EN 1186-ST[418]
	30 or 240 mg/L	n-heptane	SK[417]

SPECIFIC MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods		
Product type[420]	**Food simulant[421]**	**Food simulant for EAEU methods**
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	Simulants specified in the section V. B. 1. 3.	
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	Vegetal oil (or 2 % HOAc for styrene derivatives materials)
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid (or 0.5 % citric acid for styrene derivatives materials)
	4 % HOAc	
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	50 % EtOH	2 % HOAc + 2 % NaCl; Vegetable oil (or 0.5 % HOAc for styrene derivatives materials)
Kitchenware intended only to be brought in contact with milk products (milk, milk-based drinks, yogurt, cream, sour cream, etc.)		3 % lactic acid (or 0.3 % lactic acid for styrene derivatives materials)
Kitchenware intended only to be brought in contact with meat and processed meat products	10 % EtOH	2 % HOAc + 2 % NaCl; Vegetable oil; 5 % NaCl (or 0.5 % HOAc for styrene derivatives materials)
	Vegetal oil	

418 See protocols in chapter V. B. 8 Select protocols according to the relevant product type.
419 Acrylic resins, PA, PE, PP, PET, PETG, PLA and POM: 30 mg/L; ABS, AS, PS: 240 mg/L.
420 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.
421 Food simulants to be used for the Chinese and European test methods for specific migration, and INDITEX' protocol stages based on the aforementioned test methods, unless otherwise specified in V. B. 1 In case the specific migration has to be determed using a South Korean or Japanese test method, the specific migration shall be determined only in the food simulant(s) specified in section V. B. 1.

3. Kitchenware products made of rubber and silicon rubber: food simulants assignment

OVERALL MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[422]	**Limit**	**Food simulant[423]**	**Test method**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	60 mg/L	Water	SK[424]
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	50 mg/kg	Vegetal oil	EN 1186
	60 mg/kg	50 % EtOH	GB 4806.11
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	50 mg/kg	10 % EtOH	EN 1186
		4 % HOAc	GB 4806.11
Kitchenware intended only to bebrought in contact with eggs, egg yolk and egg white (cooked or liquid)	50 mg/kg	50 % EtOH	GB 4806.11
Tableware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)			
Kitchenware intended only to be brought in contact with meat and processed meat products	50 mg/kg	10 % EtOH	EN 1186
		Vegetal oil	
	60 mg/kg	50 % EtOH	GB 4806.11

NITROSAMINE AND NITROSTABLE SUBSTANCES SPECIFIC MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods	
Product type[425]	**Food simulant**
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH
	3 % HOAc
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	50 % EtOH
Kitchenware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	
Kitchenware intended only to be brought in contact with meat and processed meat products	10 % EtOH
	Vegetal oil

PAHs and PAA SPECIFIC MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods
Follow the specifications stablished for the selection of food simulants for specific migration for plastic materials and articles.

422 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

423 Food simulants to be used for Chinese and European test methods for specific migration unless otherwise specified in Chapter. Food simulants to be used for the Chinese and European test methods for specific migration, and INDITEX' protocol stages based on the aforementioned test methods, unless otherwise specified in Chapter V. A. In case the specific migration has to be determined using a South Korean or Japanese test method, the specific migration shall be determined only in the food simulant(s) specified in Chapter V. A.

424 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".

425 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

SPECIFIC MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods	
Product type[426]	**Food simulant for EAEU methods**
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	Simulants specified in the section V. B. 1. 3.
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	2 % citric acid
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	2 % HOAc + 2 % NaCl
	Vegetable oil
Kitchenware intended only to be brought in contact with milk products (milk, milk-based drinks, yogurt, cream, sour cream, etc.)	0.3 % or 3 % lactic acid
Kitchenware intended only to be brought in contact with meat and processed meat products	5 % NaCl
	2 % HOAc + 2 % NaCl
	Vegetable oil

4. Kitchenware products made of metals and alloys: food simulants assignment

Kitchenware products made of metals and alloys			
Product type[427]	**Food simulant**		
	Overall migration[428]	**Heavy metals migration[429]**	**EAEU method[430]**
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable	Not applicable	Not applicable
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	Artificial tap water	Vegetal oil
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	Citric acid 5 g/L	2 % citric acid
	3 % HOAc		
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	50 % EtOH	Artificial tap water	2 % HOAc + 2 % NaCl; Vegetable oil
Kitchenware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)			0.3 % or 3 % lactic acid
Kitchenware intended only to be brought in contact with meat and processed meat products	10 % EtOH		5 % NaCl; 2 % HOAc + 2 % NaCl; Vegetable oil
	Vegetal oil		

426 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

427 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

428 Only applicable to EN 1186 test method.

429 Only applicable to 'Metals and alloys used in FCM and articles. Practical Guide. 1st Edition, 2013' test method.

430 Only applicable Eurasian Economic Union methods according to the "Uniform Sanitary Epidemiological and Hygienic Requirements for the Goods Subject to Sanitary and Epidemiological Supervision (Control) – Chap II, sec. 16.".

5. Kitchenware products made of natural wood: food simulants assignment

SPECIFIC MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods		
Product type[431]	**Food simulant**[432]	**Food simulant for EAEU methods**
Tableware intended only to be brought in contact with non-fatty dry foodstuffs	Not applicable	
Tableware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	Vegetal oil
Tableware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid
	3 % HOAc[433]	
Tableware intended only to be brought in contact with milk products (milk, milk-based drinks, yogurt, cream, sour cream, etc.)	50 % EtOH	3 % lactic acid
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)		2 % HOAc + 2 % NaCl; Vegetable oil
Kitchenware intended only to be brought in contact with meat and processed meat products	10 % EtOH	5 % NaCl; 2 % HOAc + 2 % NaCl
	Vegetal oil	Vegetable oil

6. Kitchenware products with organic coatings: food simulants assignment

OVERALL MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods			
Product type[434]	**Inditex' limit**	**Food simulant**	**Test method**
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	30 mg/L	Water	SK[435]
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	60 mg/kg	Vegetal oil	EN 1186 or EN 1186-ST[436]
	30 mg/L	n-heptane	SK[435]
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM or ENSK-OM-ST[436]
	30 mg/kg	4 % HOAc	GBSK-OM or GBSK-OM-ST[436]
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	30 mg/kg	50 % EtOH	ENSK-OM or ENSK-OM-ST[436]
Kitchenware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)	30 mg/kg		
Kitchenware intended only to be brought in contact with meat and processed meat products	30 mg/kg	(EN: 10 % EtOH; SK: water)	ENSK-OM or ENSK-OM-ST[436]
	60 mg/kg	Vegetal oil	EN 1186 or EN 1186-ST[436]
	30 mg/kg	n-heptane	SK[435]

431 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.
432 Food simulants to be used for Chinese and European test methods: EN 13130-23 and SN/T 2204.
433 3 % HOAc for the European EN 13130 test methods and its parts; 4 % HOAc for the Chinese GB 31604 test methods.
434 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.
435 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".
436 See protocols in section V. B. 8. Select protocols according to the relevant product type.

SPECIFIC MIGRATION: Kitchenware products intended to be used in contact with a single type of food or specific groups of foods		
	EU & CN methods	EAEU methods
Product type[437]	Food simulant[438]	
Kitchenware intended only to be brought in contact with non-fatty dry foodstuffs	Simulants specified in section V. B. 5.	
Kitchenware intended only to be brought in contact with fatty foodstuffs or dry foodstuffs with free fats at the surface	Vegetal oil	
Kitchenware intended only to be brought in contact with processed, peeled and/or cut fruits and vegetables	10 % EtOH	2 % citric acid
	3 or 4 % HOAc[439]	
Kitchenware intended only to be brought in contact with eggs, egg yolk and egg white (cooked or liquid)	50 % EtOH	2 % HOAc + 2 % NaCl; Vegetable oil
Kitchenware intended only to be brought in contact with milk products (milk, milk based drinks, yogurt, cream, sour cream, etc.)		0.3 % or 3 % lactic acid
Kitchenware intended only to be brought in contact with meat and processed meat products	10 % EtOH	5 % NaCl; 2 % HOAc + 2 % NaCl; Vegetable oil
	Vegetal oil	

437 In case your article cannot be clustered, or if you are not sure if it can be clustered, in any of the product types considered in this table, contact Inditex Sustainability Department.

438 Food simulants to be used for the Chinese and European test methods for specific migration, and INDITEX' protocol stages based on the aforementioned test methods, unless otherwise specified in section V. B. 5. In case the specific migration has to be determed using a South Korean or Japanese test method, the specific migration shall be determined only in the food simulant(s) specified in V. B. 5. 3.

439 3 % HOAc for the European EN 13130 test methods and its parts; 4 % HOAc for the Chinese GB 31604 test methods.

V. B. 8. INDITEX PROTOCOLS FOR COMPLIANCE TESTING OF PRODUCT HEALTH REQUIREMENTS OF KITCHENWARE PRODUCTS

V. B. 8. 1. PROTOCOL: ENSK–OM 224

V. B. 8. 2. PROTOCOL: ENSK–OM–ST 225

V. B. 8. 3. PROTOCOL: GBSK–OM1 226

V. B. 8. 4. PROTOCOL: GBSK–OM1–ST 227

V. B. 8. 5. PROTOCOL: ENEN-OM-ST 228

V. B. 8. 6. PROTOCOL: GBEN–ACETALDEHYDE 229

V. B. 8. 7. PROTOCOL: GBSK–FORMALDEHYDE 230

V. B. 8. 8. PROTOCOL: GBTW–MELAMINE 231

V. B. 8. 9. PROTOCOL: GBEN–METALS 232

V. B. 8. 10. PROTOCOL: ENCR–FORMALDEHYDE 234

V. B. 8. 11. PROTOCOL: ISOEN–METALS 235

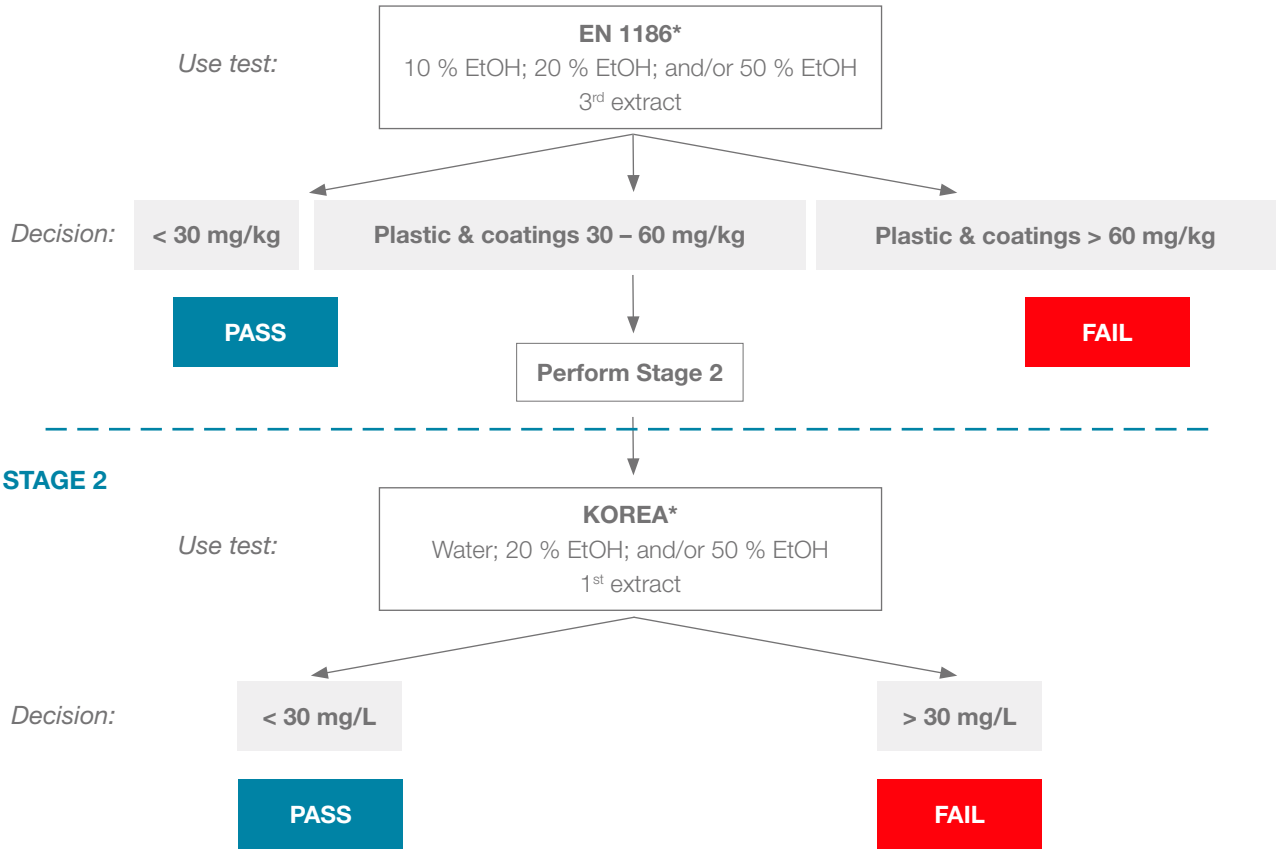
V. B. 8. 1. PROTOCOL: ENSK–OM

Protocol specified for OM from plastics and organic coatings.

If the article to be tested is a food preparation utensil for cold and ambient use and for short time contact, skip stage 1 and proceed directly with stage 2.

If the article to be tested is intended for food storage, proceed with protocol ENSK–OM–ST.

STAGE 1

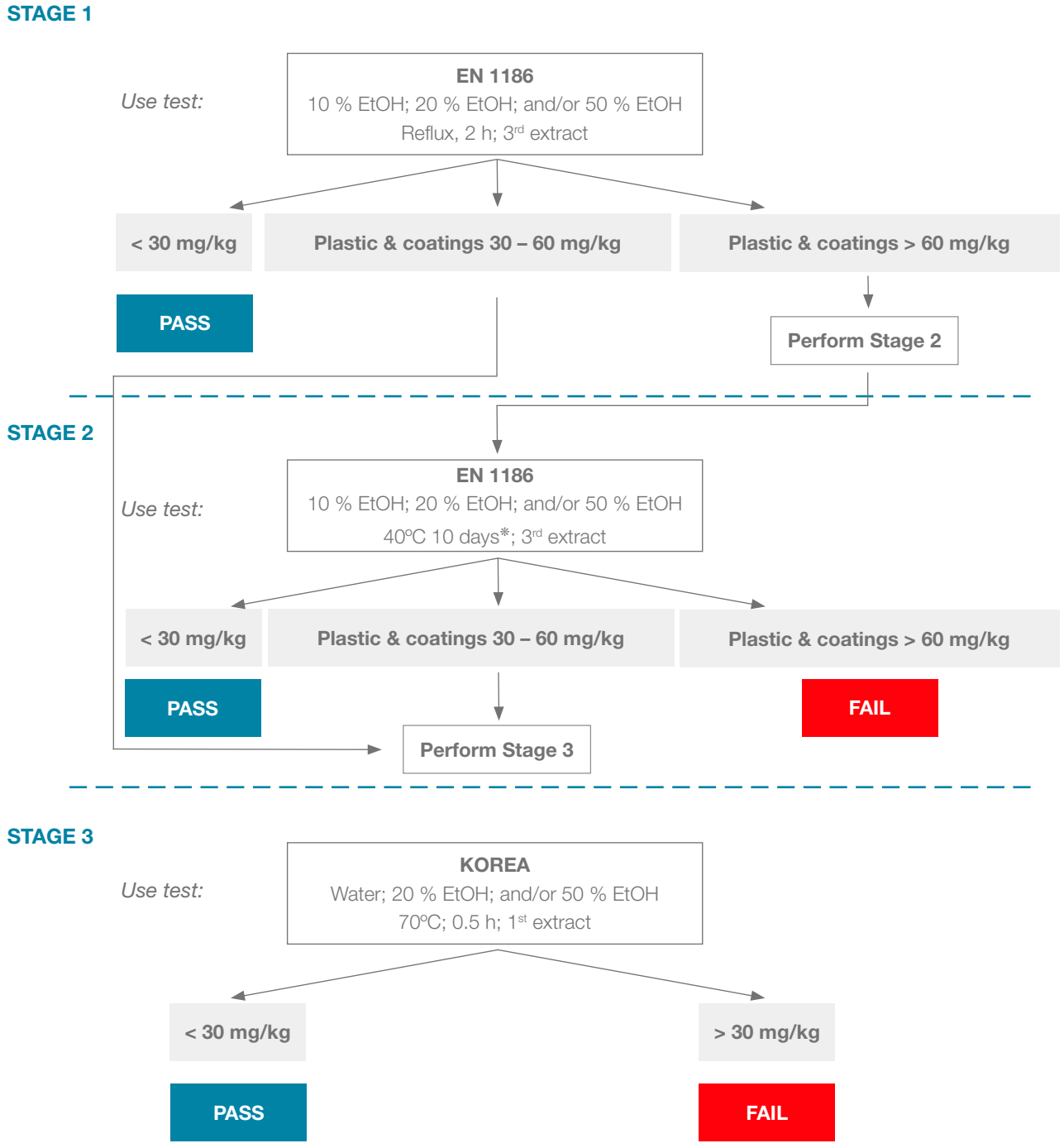


STAGE 2

* The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

V. B. 8. 2. PROTOCOL: ENSK–OM–ST

Protocol specified for OM from plastics and organic coatings.



⁕ The confirmation of suitability of ta kitchenware product intended only for cold use (*e.g.* ice cube trays) shall be verified at 20ºC for 10 days.

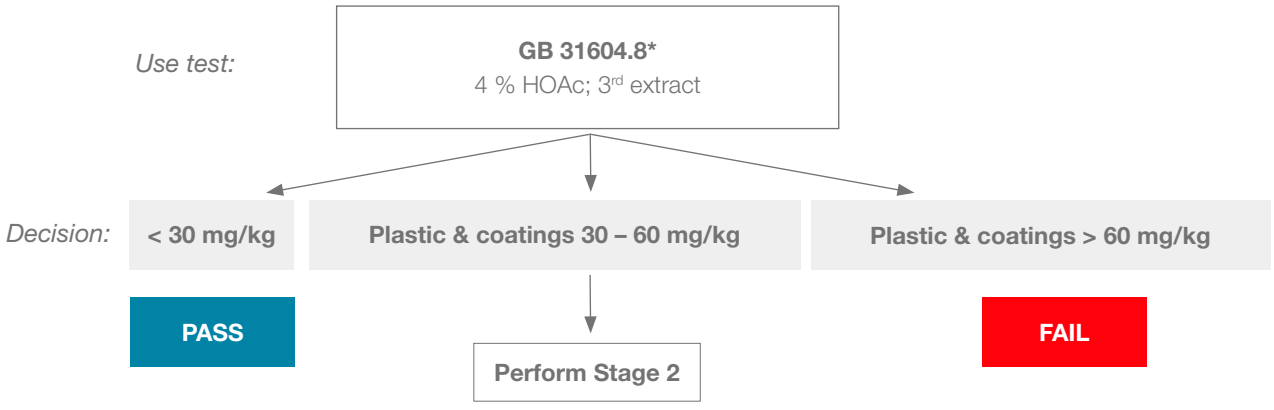
V. B. 8. 3. PROTOCOL: GBSK–OM1

Protocol specified for OM from plastics and organic coatings.

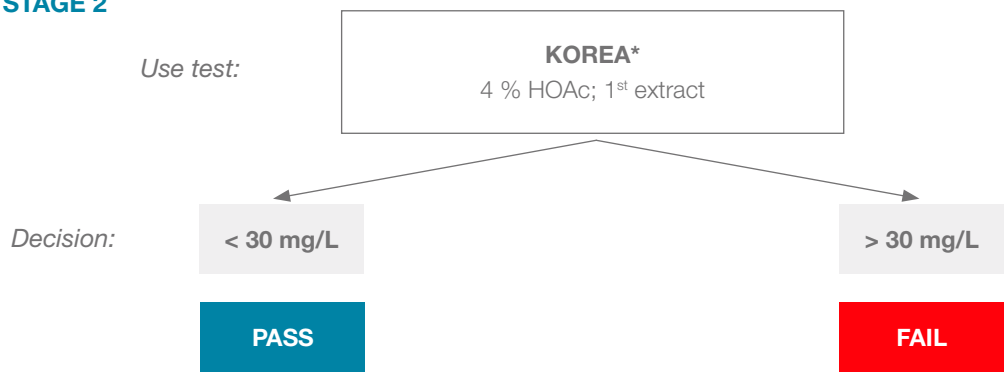
If the article to be tested is a food preparation utensil for cold and ambient use and for short time contact, skip stage 1 and proceed directly with stage 2.

If the article to be tested is intended for food storage, proceed with protocol GBSK–OM1–ST.

STAGE 1



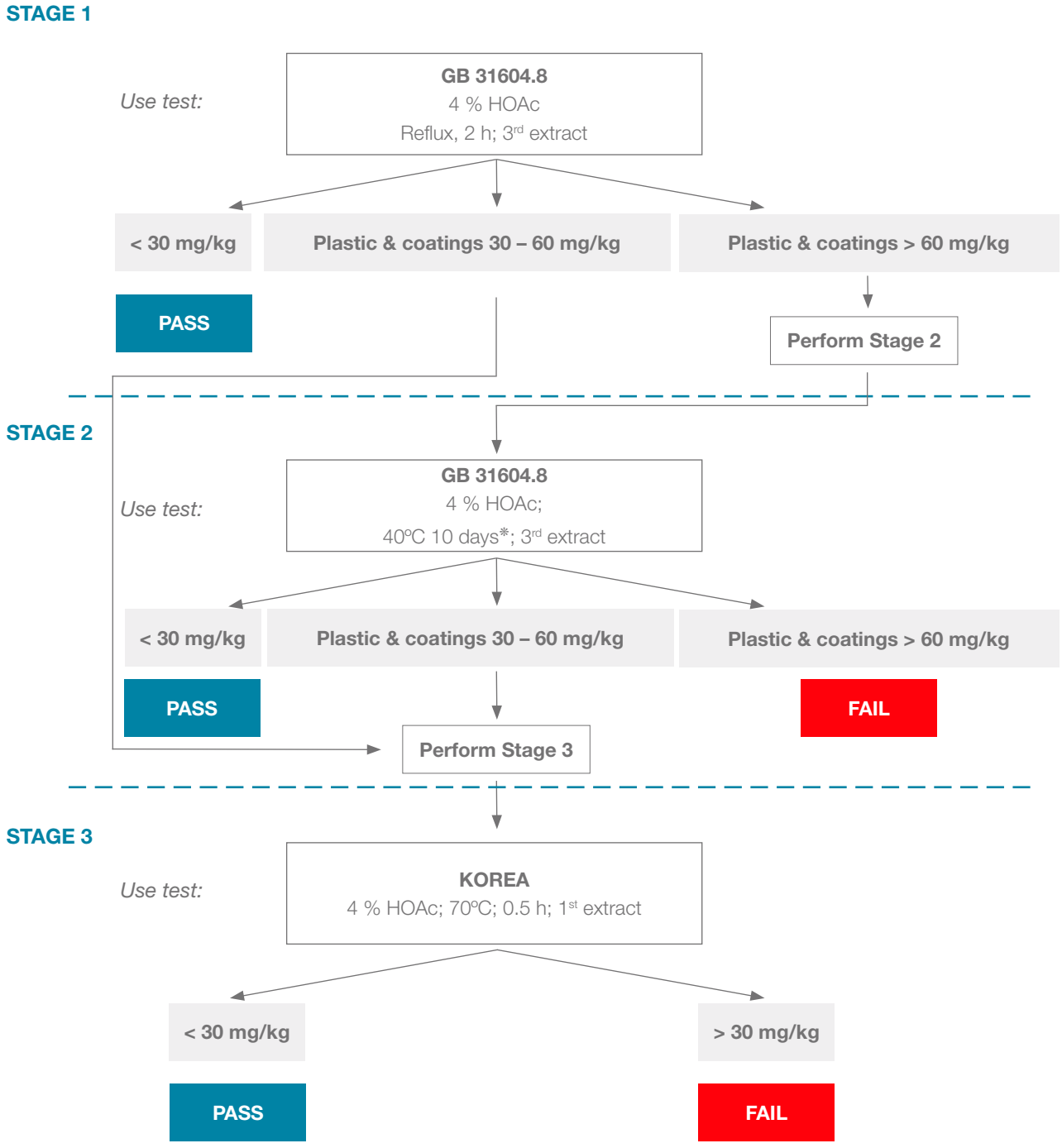
STAGE 2



* The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

V. B. 8. 4. PROTOCOL: GBSK–OM1–ST

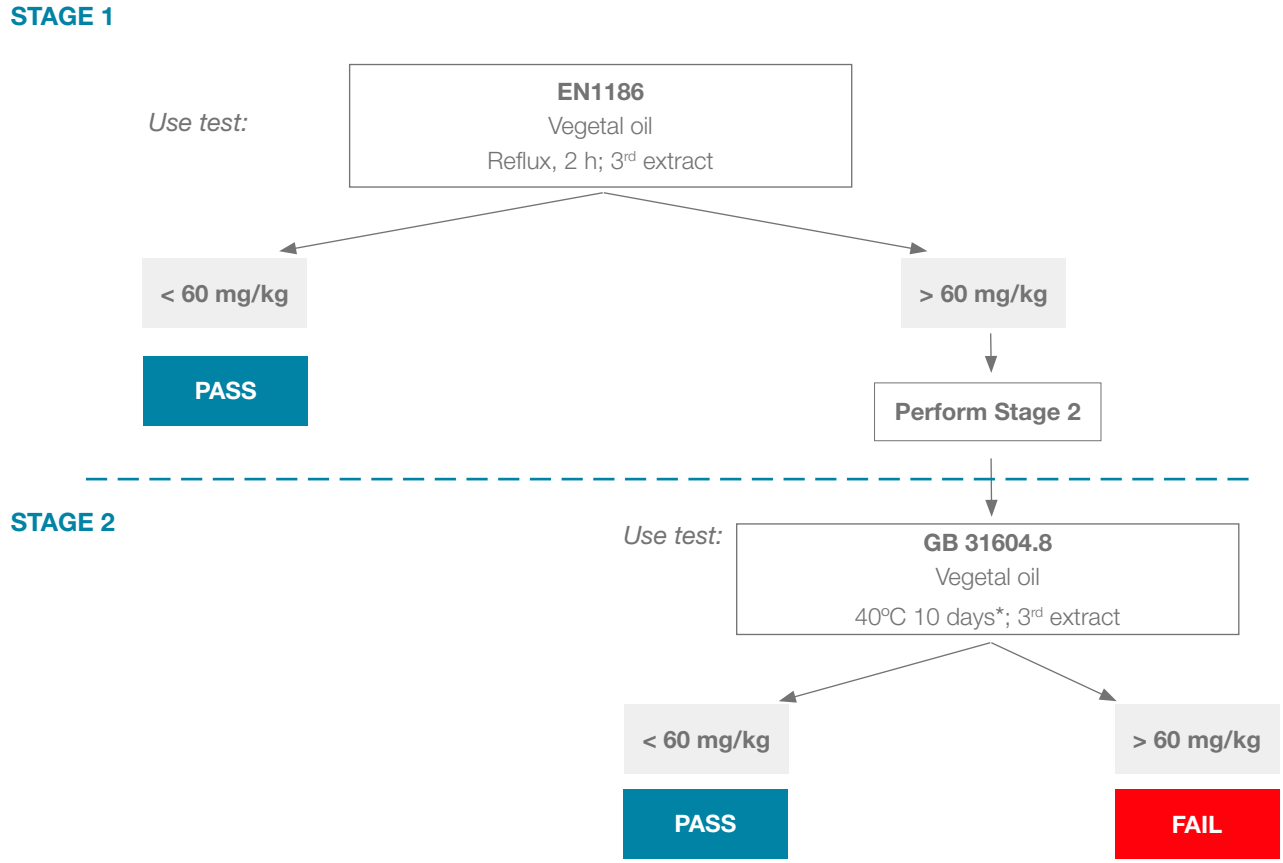
Protocol specified for OM from plastics and organic coatings.



⁕ The confirmation of suitability of ta kitchenware product intended only for cold use (*e.g.* ice cube trays) shall be verified at 20ºC for 10 days.

V. B. 8. 5. PROTOCOL: ENEN-OM-ST

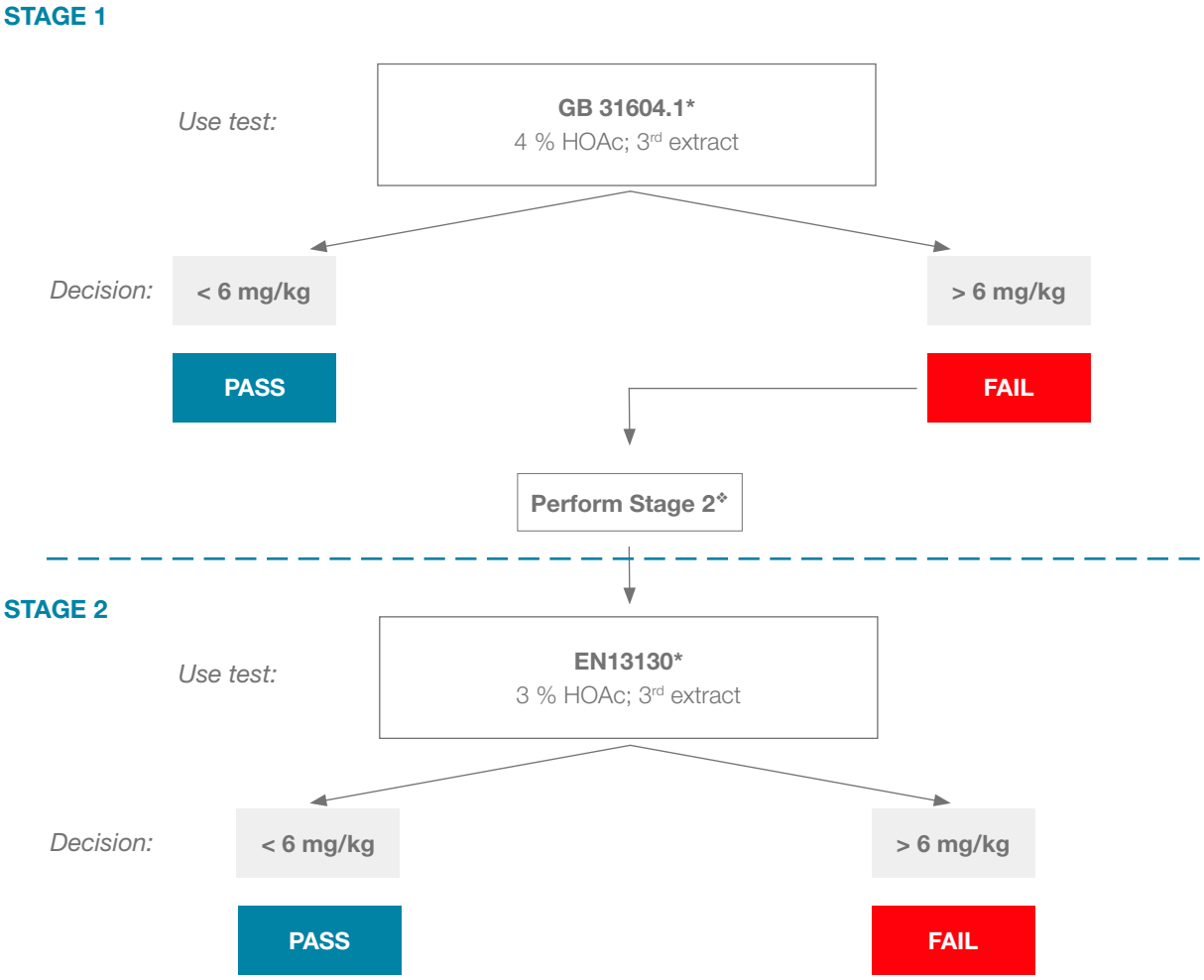
Protocol specified for OM from plastics and organic coatings.



* The confirmation of suitability of ta kitchenware product intended only for cold use (*e.g.* ice cube trays) shall be verified at 20ºC for 10 days.

V. B. 8. 6. PROTOCOL: GBEN–ACETALDEHYDE

Protocol specified for acetaldehyde SM from PET / PETG:



* The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ If stage 2 is necessary to be performed, contact Inditex Sustainability department.

V. B. 8. 7. PROTOCOL: GBSK–FORMALDEHYDE

Protocol specified for formaldehyde SM from plastics and organic coatings. If the article to be tested is a food preparation utensil for cold and ambient use and for short time contact, skip stage 1 and proceed directly with stage 2.

STAGE 1

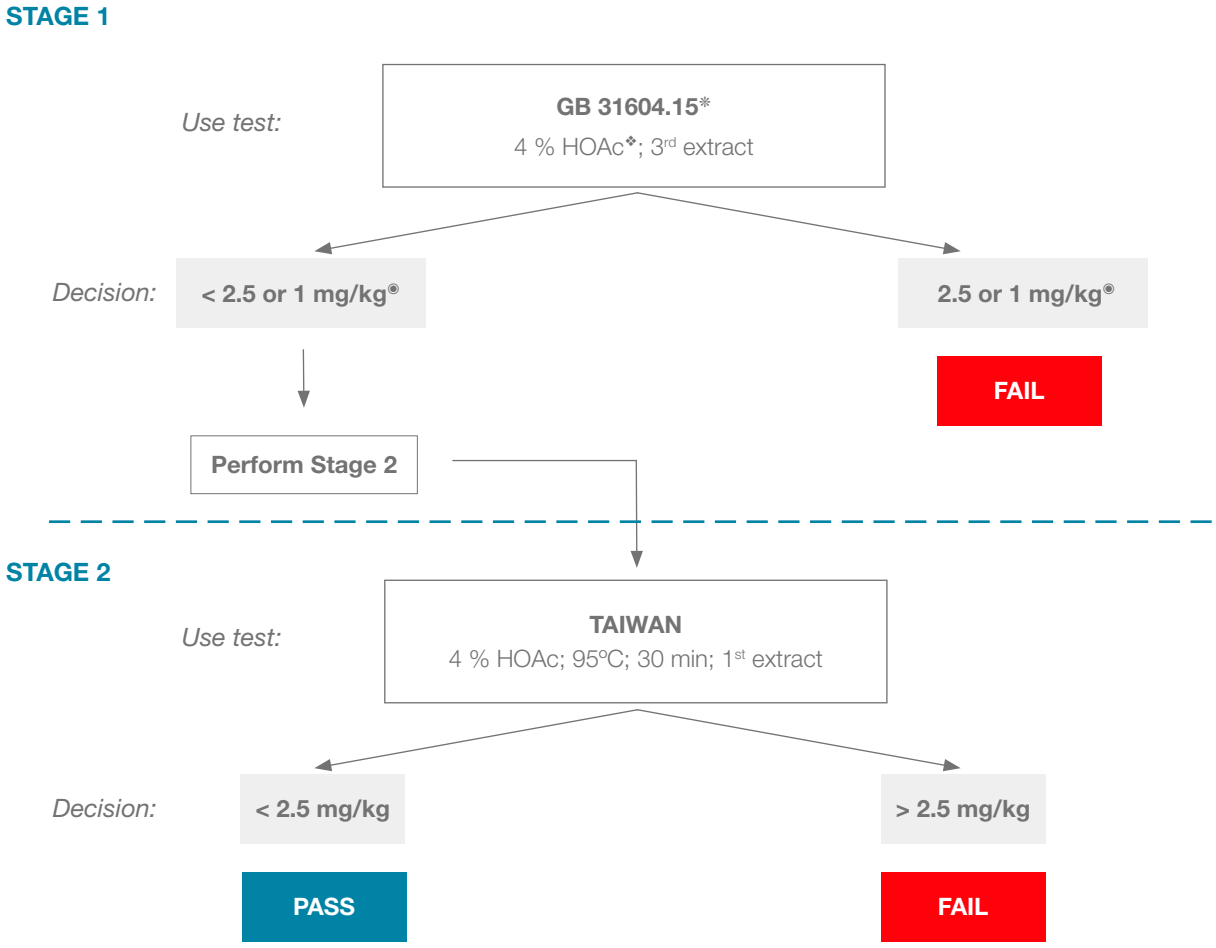
STAGE 2

❋ The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ Kitchenware products intended to come into contact with all types of food stuffs shall be analyzed in 4 % HOAc. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.

V. B. 8. 8. PROTOCOL: GBTW–MELAMINE

Protocol specified for melamine monomer SM from melamine:



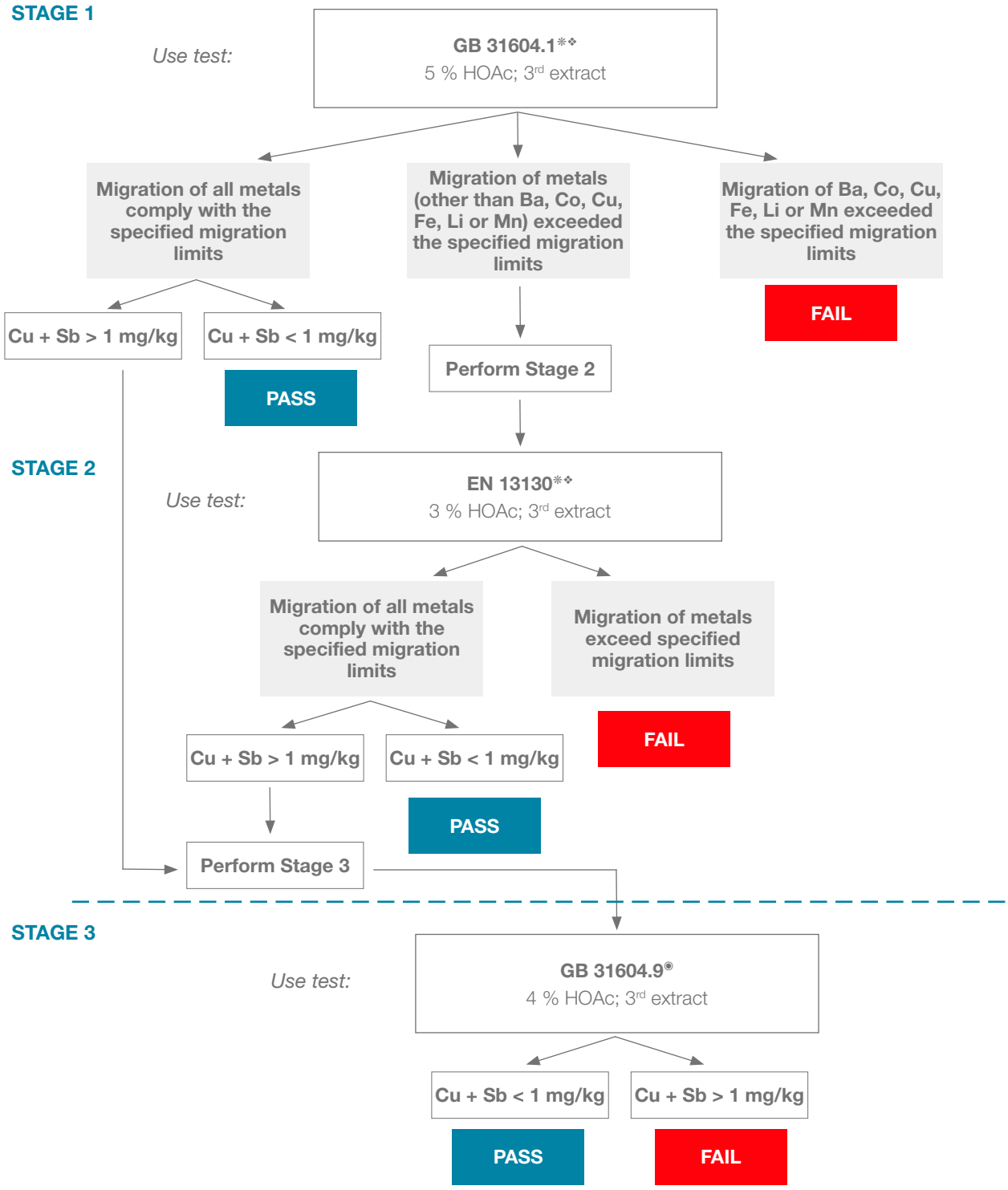
❋ The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ Tableware products intended to come into contact with all types of food stuffs shall be analysed in 4 % HOAc. Tableware products intended to come into contact with a single type of food or specific groups of foods shall be tested only in the food simulant(s) that correspond to the relevant food category. See section V. B. 7. 4 as reference.

◉ Articles intended to be brought into contact with food intended for infants shall not transfer melamine monomer to food simulants in quantities exceeding 1 mg per kg of food simulant.

V. B. 8. 9. PROTOCOL: GBEN–METALS

Protocol specified for metal migration from plastic, rubber, silicon rubber and organic coating materials:



❊ The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

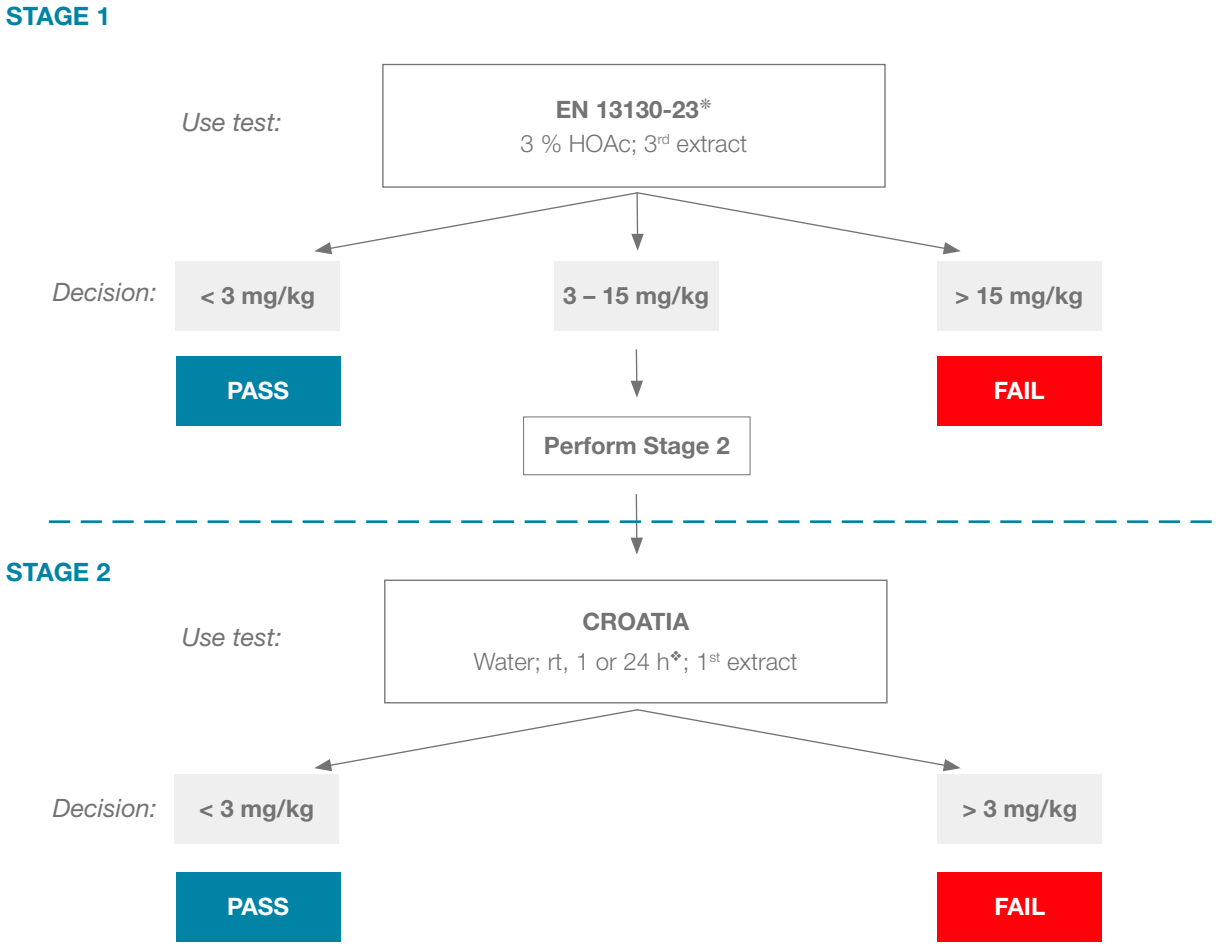
❖ Analytical determination of metals is performed by ICP-MS or ICP-OES analysis.

◉ The appropriate time and temperature test conditions to perform the GB 31604.9 test method shall be selected according to the provisions stablished in the following table:

Material	Type of product	Test conditions
PLASTIC	All types of products	60ºC, 2 h
RUBBER	All types of products	60ºC, 0.5 h
SILICON RUBBER	All types of products	60ºC, 0.5 h
ORGANIC COATINGS	Food storage Food preparation utensils and containers	60ºC, 2 h
ORGANIC COATINGS	Microwave materials for warming up or defrosting Utensils used during cooking / frying /grilling Cookware (including microwave cooking) Bakeware	100ºC, 0.5 h followed by 24 h at rt

V. B. 8. 10. PROTOCOL: ENCR–FORMALDEHYDE

Protocol specified for formaldehyde migration from wood articles.



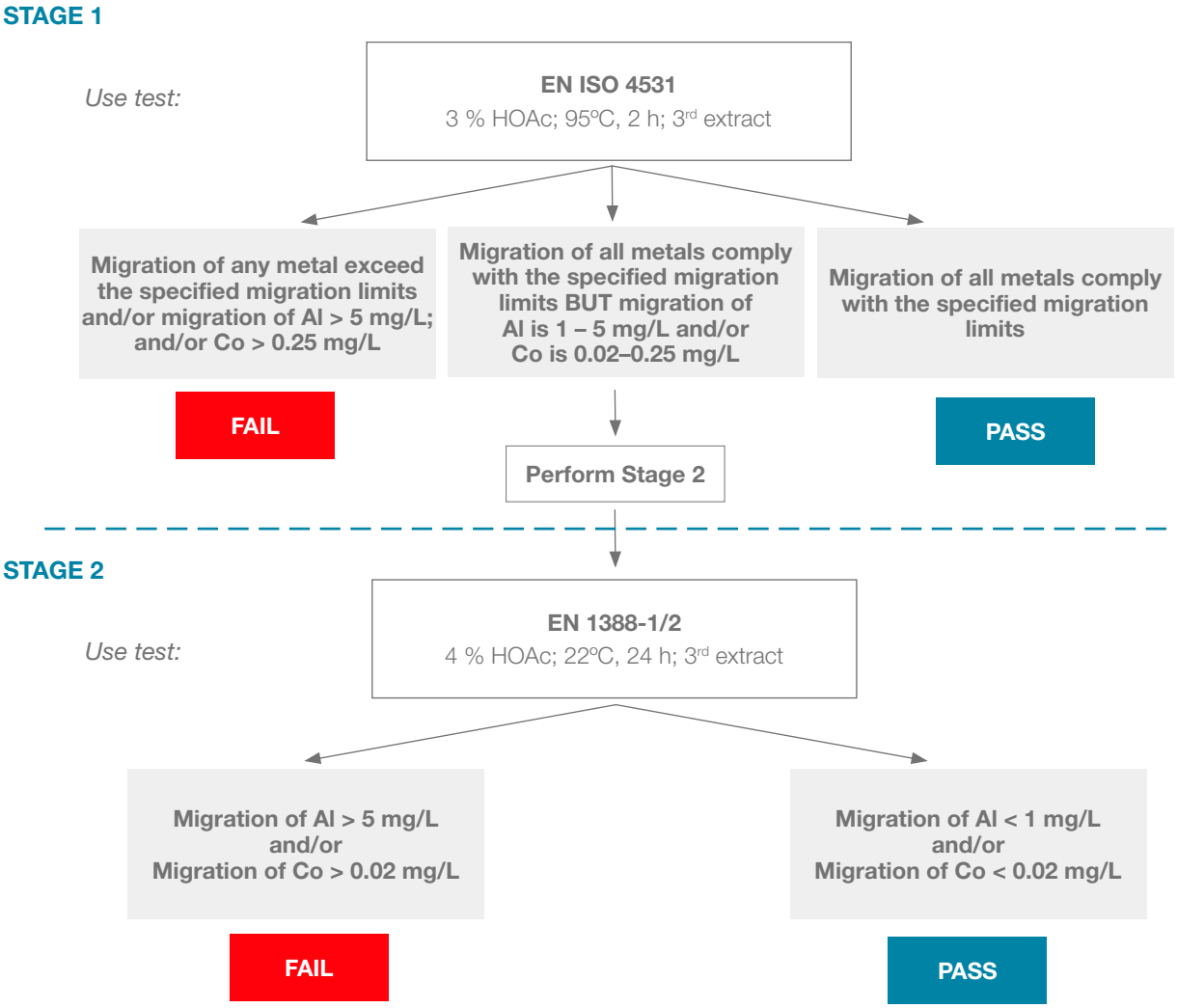
❋ The appropriate time and temperature test conditions shall be selected according to section V. B. 7 (*i.e.*'Technical Guidelines for Compliance Testing') for the relevant product type.

❖ If the article to be tested is a kitchenware for cold and/or ambient use for short term contact or for cold, ambient and/or hot use for a maximum time of $t = 120/2^{[(T-70)/10]}$: 1 h.

If the article to be tested is a tableware for cold and/or ambient use for long term-contact: 24 h.

V. B. 8. 11. PROTOCOL: ISOEN–METALS

Protocol specified for metal migration from enamelled cookware and bakeware.



VI. PRODUCT SAFETY REQUIREMENTS

i+FCM

Inditex Precautions and Limits for Users Safety for Food Contact Materials

VI. A. PRODUCT SAFETY REQUIREMENTS FOR COOKWARE AND OVENWARE

VI. A. 1. PRODUCT SAFETY REQUIREMENTS FOR ALL TYPES OF COOKWARE AND OVENWARE 240

VI. A. 2. ADDITIONAL PRODUCT SAFETY REQUIREMENTS FOR COOKWARE AND OVENWARE MADE OF METALS AND ALLOYS 242

VI. A. 3. ADDITIONAL PRODUCT SAFETY REQUIREMENTS FOR COOKWARE AND OVENWARE MADE OF CERAMIC AND GLASS 243

VI. A. 4. ADDITIONAL PRODUCT SAFETY REQUIREMENTS FOR OVENWARE MADE OF FLEXIBLE MATERIALS 243

VI. A. 5. APPLICABLE REGULATIONS 243

VI. A. 1. PRODUCT SAFETY REQUIREMENTS FOR ALL TYPES OF COOKWARE AND OVENWARE

To comply with Inditex' requirements the Supplier must ensure that cookware and ovenware products comply with the following requirements:

General Requirements for COOKWARE and OVENWARE			
Parameter	**Requirements**	**Method**	**Notes on verification of compliance**
Stability	EN 13834 / EN 12983: Place the article empty, with out lid, on a 5º incline to determine if it remains stable in the least favorable position. JIS 2010: Fill the article with water and place it, provided with the lid (in case it is applicable), on a 15º incline to determine if it remains stable in the least favorable position.	EN 13834:2020 or EN 12983-1:2001 and JIS 2010:2013 (5.2)	-
Mecanical hazards	All components shall be free from burrs, splinters or sharp edges that could cause injury or discomfort to the user. If the thickness of the main body is 0.6 mm or less, the edge shall be wound.	Visual and tactile inspection or safety evaluation using a CATRA sharp edge tester.[440]	-
Heat resistance	The ovenware shall show no damage and/or after exposing it to a specific temperature for 1 h.	EN 13834:2020 (6.1.9)	This requirement does not apply to articles intended to be used exclusively on the top of a hob.
Handle position	Handles shall be positioned above the center of gravity of an item when filled to its capacity. Additionally, for low depth cookware utensils, there must be a minimum distance of 30 mm between the handle and the horizontal plane of the utensil base.	EN 13834:2020 or EN 12983-1:2001	-
Handle and Knob design	It shall be possible to use the knob for its normal purposes while using an oven glove or cloth. The handle must be able to hold the main body securely, stably and appropriately. Direct metal-to-glass contact *(i.e.* metal knobs and/or handles) should be avoided, if possible, by the use of gasketing material to protect the glass. Additionally for ovenware, the knob shall remain firmly attached to the lid after exposing it to a temperature 20ºC above the manufacture's maximum recommended temperature, for 1 h.[441]	EN 12983-1:2001 or EN13834:2020	-
Lid design	It shall be possible to remove it from the body using a force equal to the weight of the lid, +2 N, in any position at ambient temperature. The lid shall remain in place throughout the heating and cooling stages and the lateral slippage shall be difficult.	EN 12983-1:2001 or EN13834:2020	-
Combustion resistance of the handle	The cookware handle must not melt, drip molten and / or burns.[442]	EN 12983-1:2001 + A1:2005	This requirement is not applicable to ovenware handles exclusively made of non-flammable materials and articles intended to be used only in an oven.

Continued on next page

440 Recommended test method: safety evaluation using a CATRA sharp edge tester or equivalent.
441 If no recommendation is given, the temperature shall be 250ºC.
442 Any point of combustion must self-extinguish before 15s after removing the flame. Once extinguished, the handle material should not spontaneously self-heat.

General Requirements for COOKWARE and OVENWARE			
Parameter	**Requirements**	**Method**	**Notes on verification of compliance**
Number of handles	All cookware, except those with a low depth,[443] with a capacity greater than 3.75 L or a total weight of 5 kg when they are full of water at their capacity, must be equipped with two handles.	EN 12983-1:2001 + A1:2005	This requirement is not applicable to articles intended to be used only in an oven.
Fatigue resistance and Heat resistance of the handle	Handle assembly shall withstand 15000 cycles without permanent distortion or permanent loosening of the handle or its fixing system.[444] If a handle, or its fixing system, presents cracks and / or blisters after the preconditioning stage, it shall be considered non compliant.[445]	EN 12983-1:2001 (mod) or EN 13834:2020[446]	Applicable only to handles which are not an integral part of the body and that are attached to the body using a fixing system.
Thread engagement	Three full turns of screw into and/or through the mating part are recommended, when assembling and/or sticking side handles to pans or knobs to lids with threaded screws or studs.	-	-
Handle strength	The handle and its fixing system *(i.e.* rivets, welds, etc.) shall withstand the cold and hot tests without breaking, loosening or deforming.	Cold test: ITX-EN 12983-1:2001[447] Hot test: CMA Engineering Standards for Cookware and Bakeware (3.3.1.3)	Applicable only to handles that are not an integral part of the body and that are attached to the body using a fixing system.
Torsion resistence of handle	The movement of the handle must not exceed 10º in any direction. The handle shall withstand this test without undergoing any damage that affects the function of the handle, or of the fixing system.	EN 12983-1:2001	This requirement is not applicable to articles intended to be used only in oven.
Resistance to leakage	Cookware and ovenware –including ovenware with folded seams and loose bottoms– shall be designed to avoid leaking when used according to the manufacturer instructions and when filled with any preparation that may be expected to be cooked in it.	ITX-resistance to leakage	-

443 Cookware whose total internal depth is equal to or less than 1/3 of the inside diameter measured at the top edge.

444 A deformation of less or equal to 5 % (3 % for cookware) of the length of the handle, measured at the end of the handle, shall not be taken into account unless it affects its function or safety. Deformation shall be measured according to the JIS 2010:2013 test method.

445 This requirement is not applicable to purely decorative complements such as thermoplastic inlays or cookware sleeves.

446 The time and temperature for the preconditioning stage shall be 2 h at 150ºC for cookware and 1 h at 20ºC above the manufacturer's recommended maximum temperature (or 250ºC where no maximum temperature is given) for ovenware.

447 If the weight of article plus 3 times the weight of water capacity of the article is more than 10 kg, the following test methods shall be used:

- Enameled cookware and ovenware: GB/T 13484 (6.2.1);
- Stainless steel cookware and ovenware: GB/T 29601-2013 (6.2.8);
- Aluminium and aluminium alloys non-stick cookware: GB/T 32388-2015 (6.2.6); and
- Domestic steel cookware: GB/T 32432-2015 (6.7).

Select the adequate test method for the relevant product type.

VI. A. 2. ADDITIONAL PRODUCT SAFETY REQUIREMENTS FOR COOKWARE AND OVENWARE MADE OF METALS AND ALLOYS

To comply with Inditex' requirements the Supplier must ensure that cookware and ovenware products made of metals and alloys shall meet, besides the requirements specified in section VI. A. 1 of this Standard, the following specifications:

Additional requirements for COOKWARE and OVENWARE made of metals and alloys			
Parameter	**Requirements**	**Method**	**Notes of verification of compliance**
Heat resistance	There shall be no separation of the base from the body of the article and no molten metal escaping from the body/base juncture.	CMA Engineering Standards for Cookware and Bakeware: dry boil test	This requirement is applicable to cookware with encapsulated and brazed bottoms. This requirement is not applicable to articles intended to be used only in an oven.
Thermal risk	The maximum temperature of handles and knobs shall not exceed the following temperatures: a) 55ºC for handles and knobs made of metals and alloys; b) 70ºC for handles and knobs made of plastic materials; c) 89ºC for handles and knobs made of wood;[448] and d) 66ºC for handles and knobs made of ceramics, glass and natural rocks.	EN 12983-1:2001	This requirement is not applicable to articles intended to be used only in an oven.
Thermal risk (handle and knob desing)	When using the handle(s) and the knob for their usual purpose, it shall not be possible to touch any metal part that is within the isolated portion of the article and that exceeds 55ºC.	EN 12983-1:2001	This requirement is not applicable to articles intended to be used only in an oven.
Inclination angle	The inclination angle shall not exceed 20°.	GB/T 32432 (6.5.2)	This requirement only apply to cookware used on top to a gas hob.
Spout strength	There shall be no breakage or water leakage in the joint between the main body and the spout after the test.	JIS S 3012:1998 (9.14)	Applicable only to kettles

448 In case of wood, the temperature shall not exceed the 75ºC at 5 min of exposure for aluminium cookware (for aluminium kettles the maximum temperature shall not exceed the 75ºC at 1 min of exposure.).

VI. A. 3. ADDITIONAL PRODUCT SAFETY REQUIREMENTS FOR COOKWARE AND OVENWARE MADE OF CERAMIC AND GLASS

To comply with Inditex' requirements the Supplier must ensure that cookware and ovenware products made of ceramic and glass shall meet, besides the requirements specified in section VI. A. 1 of this chapter, the following specifications:

Additional requirements for cookware and ovenware made of ceramic and glass			
Parameter	**Requirements**	**Method**	**Notes**
Thermal shock resistance	There shall be no breakage or cracks at a $\Delta T = 180ºC$.[449]	EN 13834:2020 (6.1.8)	–
Thermal shock resistance of the bottom	There shall be no breakage or cracks after 10 cycles of the test.	See note[450]	This requirement is not applicable to articles intended to be used only in an oven.
Resistance from freezer to oven	There shall be no breakage or cracks.	GB/T 3532- 2009 (6.8)	This requirement is only applicable to ovenware

VI. A. 4. ADDITIONAL PRODUCT SAFETY REQUIREMENTS FOR OVENWARE MADE OF FLEXIBLE MATERIALS

To comply with Inditex' requirements the Supplier must ensure that ovenware products made of flexible materials shall meet, besides the requirements specified in section VI. A. 1 of this chapter, the following specifications:

Additional requirements for ovenware made of FLEXIBLE MATERIALS		
Parameter	**Requirements**	**Method**
Tear resistance	There shall be no fissures or breakage after exposing the test articles to a specific temperature for 1 h.	EN 13834:2020 (Annex I)

VI. A. 5. APPLICABLE REGULATIONS

- **European Union Regulation:**

– EN 12983-1:2000 Cookware. Domestic cookware for use on top of a stove, cooker or hob. General requirements.

– EN 13834:2020 Cookware - Ovenware for use in traditional domestic ovens.

- **Chinese regulation:**

– GB/T 32432-2015 Domestic steel cookware.

– GB/T 3532- 2009 Domestic porcelain ware.

- **Japanese regulation:**

– JIS S 3012:1998 Vitreous and porcelain enamelled household warers of sheet steel.

- **USA regulation:**

– CMA Engineering Standards for Cookware and Bakeware.

449 If the 3 samples pass the test, no additional test is needed. If one fails, 7 additional samples shall be tested.

Lids shall withstand a $\Delta T = 120ºC$.

Cookware and ovenware intended for use on top of the stove, directly exposed to flames, and able to withstand sudden temperature changes shall show no breakage or cracks at the following temperature differential:

– Cookware and ovenware made of glass: $\Delta T^a = 400ºC$.

– Cookware and ovenware made of ceramic: $\Delta T^a = 350ºC$.

450 Cookware shall be heated empty at 200ºC and subsequently filled with water at rt (20ºC). This protocol shall be repeated 10 times. Cookware shall be let to cool down at least 50ºC between cycles.

VI. B. PRODUCT SAFETY REQUIREMENTS FOR OTHER TYPES OF TABLEWARE AND KITCHENWARE

VI. B. 1. PRODUCT SAFETY REQUIREMENTS FOR KNIVES 245

VI. B. 2. PRODUCT SAFETY REQUIREMENTS FOR MICROWAVE-SAFE FOOD CONTACT ARTICLES 245

VI. B. 3. APPLICABLE REGULATIONS 245

VI. B. 1. PRODUCT SAFETY REQUIREMENTS FOR KNIVES

To comply with Inditex' requirements the Supplier must ensure that all types of knives shall meet the following specifications:

Requirements for knives		
Parameter	**Requirements**	**Method**
Mechanical hazards	Knives shall not have any defects –such as deformations, deep scratches, cracks, burrs, roughness or chipping– that may incur injuries during their foreseeable use.	Visual and tactile inspection or safety evaluation using a CATRA sharp edge tester.[451]
Fixing system strength of the handle	Handles that are not an integral part of the cutting utensil to be tested shall be provided of a fixing system that avoids the rotation of the handle in relation to the rest of the piece and that prevents any slippage of the handle from the blade.	EN ISO 8442-1:1997 (6.3)
Resistance of the plastic handle against cracks due to stress	The plastic handles of the knives should not be broken once assembled.	EN ISO 8442-1:1997 (6.6 – A.3)

VI. B. 2. PRODUCT SAFETY REQUIREMENTS FOR MICROWAVE-SAFE FOOD CONTACT ARTICLES

Resistance to microwave oven			
Material	**Parameter**	**Requirements**	**Method**
Plastic; ceramic; and glass	**Suitability for microwave heating**	The articles shall show no breakage or damages.[452] No electrical arcing shall occur.	EN 15284:2007 (visual inspection)
		Surface temperature of handles:[453] – Plastic: < 60ºC; – Ceramic and glass: < 56ºC	EN 15284:2007
Glass		The articles shall show no breakage or cracks at a $\Delta T \geq 120$ºC	SK[454]
Ceramic	**Resistance from freezer to microwave oven**	The articles shall show no breakage or damages. No electrical arcing shall occur.	GB/T 3532

VI. B. 3. APPLICABLE REGULATIONS

- **European Union Regulation**

– EN 15284:2007 Materials and articles in contact with food stuffs. Test method for the resistance to microwave heating of ceramic, glass, glass-ceramic or plastic cookware.

– EN ISO 8442-1:1997 Materials and articles in contact with foodstuffs — Cutlery and table holloware — Part 1: Requirements for cutlery for the preparation of food.

- **Chinese regulation**

– GB/T 3532-2009 Domestic porcelain ware

- **Korean regulation**

– Standards and Specifications for Utensils, Containers and Packaging for Food Products.

451 Recommended test method: safety evaluation using a CATRA sharp edge tester or equivalent.
452 Type of damages:
– Article made of plastic: Cracking, colour, melting, deformation, suitability for re-use and charring.
– Article made of ceramic: Cracking, crazing, scaling and colour.
– Article made of glass: Cracking, scaling and colour.
453 After short period microwave heating.
454 Use the appropriate Korean methods according to the type of food contact material. "Korean Standards and Specifications for Utensils, Containers and Packaging for Food Products. 2019. Part II".

VI. C. PRODUCT SAFETY REQUIREMENTS FOR CHILDREN'S TABLEWARE[455]

VI. C. 1. PRODUCT SAFETY REQUIREMENTS FOR CHILDREN'S CUTLERY AND FEEDING UTENSILS 247

VI. C. 2. PRODUCT SAFETY REQUIREMENTS FOR CHILDREN'S DRINKING EQUIPMENT 249

VI. C. 3. APPLICABLE REGULATIONS 253

455 See definition in Annex III.

VI. C. 1. PRODUCT SAFETY REQUIREMENTS FOR CHILDREN'S CUTLERY AND FEEDING UTENSILS[455]

To comply with Inditex' requirements the Supplier must ensure that all types of Children's Cutlery and Feeding Utensils shall meet the following specifications:

Requirements for Children's Cutlery and feeding utensils			
Parameter	**Requirements / Limit**	**Method**	**Notes of verification of compliance**
Visual and tactile examination	All components of cutlery and feeding utensils when assembled for use, shall be free from points and edges which are likely to cause injury. The article shall be free from splinters, burrs and flash.	EN 14372	
Sharp points	Accessible points shall not be Sharp points.	EN 71-1	
Sharp edges	Accessible edges shall not be Sharp edges.	EN 71-1	
Small parts	No component part of tested sample shall fit entirely within the "small part cylinder" in any orientation and without compression.	EN 14372 (5.2.4)	
Holes (Finger traps)	There shall be no accessible hole which allows the insertion of a 5.5 mm diameter rod, unless the accessible hole also allows the insertion of a 12 mm diameter rod or has a penetration of less than 10 mm. Also, non-circular holes with acute V-shaped angles or inward facing angles that are not well rounded should be avoided.	EN 14372 (5.2.5)	This requirement applies only to components made of materials with a shore A hardness of more than 60 IRHDs.
Printed decorations resistance	- No print from decoration shall be removed from any product. - Adhesive labels shall not be used.	EN ISO 2409	
Tensile strength	No component that shall break, tear or separate during this test.	EN 14372 (6.2.3)	This requirement applies to: - all products with more than one component and which are intended to be held by a child, and - any projection of a product that the child can grasp with at least the thumb and forefinger or the teeth.
Torque test	No component shall break, tear or separate during this test.	EN 71-1 (8.3)	This requirement applies to all components (projection, part, assembly, ...) that can be griped between thumb and forefinger or with the teeth.

Continued on next page

Requirements for Children's Cutlery and feeding utensils			
Parameter	**Requirements / Limit**	**Method**	**Notes of verification of compliance**
Tear resistance	The tested component shall not break, tear or separated during the subsequent tensile test.	EN 14372 (6.2.4)	This requirement applies to any component produced out of materials with a Shore A hardness of less than 60 IRHDs but excluding suction pads.
Strength/rigidity	No component of cutlery shall break, tear or separate.	EN 14372 (6.2.5)	This requirement only applies to cutlery.
Drop test	All product shall be tested. Any components or pieces which have become detached or broken from the article as a result of the test shall be subject it to the "Small parts test", "Sharp points test", "Sharp edges test" and "Driving mechanisms" ((4.10.2) EN 71-1).	EN 71-1 (8.5) modified[456]	If the product breaks, the following warning shall be provided: "This product may break if dropped".
Migration of certain metals	The migration of certain metals shall not exceed any of the following limits:	EN 14372 (6.3.1)	
	Element: Limit (mg/kg)		
	Sb: 15		
	As: 10		
	Cd: 100		
	Pb: 20		
	Cr: 25		
	Hg: 10		
	Se: 100		
Phthalate content	The content shall not exceed 0.1 % (m/m).	EN 14372 (6.3.2)	This requirement only applies to thermoplastic components.
Volatile compounds content	The content shall not exceed 0,5 %.	EN 14372 (6.3.3)	This requirement only applies to silicone rubber components.
Migration of Formaldehyde	The formaldehyde migration shall not exceed 15 mg/kg.	EN 14372 (6.3.4)	This requirement only applies to components made of thermosetting plastics and/ or wood.
Nickel release	The nickel release shall not exceed 0.5 µg/cm^2.	EN 14372 (6.3.5)	This requirement only applies to metal or alloys components.
BPA release	BPA release shall not exceed 0.03 µg/mL.	EN 14372 (6.3.6)	This requirement only applies to components made of PC or polysulfone.

456 If the article is intended to use by children:

– ≤ 18 months of age: The article shall be dropped 10 times from a height of 1.37 m.

– > 18 but < 36 months of age: The article shall be dropped 5 times from a height of 0.92 m.

VI. C. 2. PRODUCT SAFETY REQUIREMENTS FOR CHILDREN'S DRINKING EQUIPMENT[455]

To comply with Inditex' requirements the Supplier must ensure that all types of Children's Drinking Equipment shall meet the following specifications:

Requirements for Children`s Drinking equipment			
Parameter[457]	**Requirements / Limit**	**Method**	**Notes of verification of compliance**
Decoration, inscription and decals	All areas of drinking equipment may be decorated or inscribed by techniques which do not apply materials to their surface. Areas with intended food contact may only be printed or inmold labelled, if this printed or inmold labelled area is completely covered by a functional barrier. Areas of drinking accessories that are intended or foreseeable to be mouthed shall not be printed, also not when covered by a functional barrier including inmold labelling. Areas of drinking equipment that are not intended to contact food and/or to be mouthed may be decorated or inscribed with techniques which apply colorant such as printing with printing inks. Adhesives decals and labels intended to stay on the product during use are not allowed on any part of drinking equipment. Decorations shall not be attached to any part of drinking equipment by glue.	EN 14350 - 2020 (7.2)	Functional barrier according to EU/10/2011. A drinking cup which provides a drinking rim and is also intended to be used without a drinking accessory or similar product where the child`s mouth can contact the outside of the cup shall not be printed and/or inmold labelled on the area extending to 20 mm measured from the drinking rim.
Visual and tactile examination	All components of drinking equipment when assembled for use shall be free from any accessible sharp points or edges and free of flash and burrs, which could cause injuries.	EN 71-1 (Sharp point and sharp edge test)	
	It shall be clean and there shall not be foreign objects, gaps, holes or deformations that affect the use (except for design requirements).	GB38995-2020 (4.1.1.1)	Check visually under natural light.
Light transmittance	When the bottle is installed and used correctly, the volume scale should be clearly visible, and the level of the fluid food in the bottle should be clearly identifiable.	GB38995-2020 (4.1.2.5)	This requirement is not applicable to metal baby bottles.
Small parts	All parts which are designed to be removed (e.g. for cleaning) or become separated after the tensile, drop test or other mechanical test shall not fit entirely within the "small parts cylinder" in any orientation and without compression.	EN 14350-2020 (7.4)	This requirement also applies to detachable protective covers. All parts of glass or ceramic components which fall off after the drop test shall be comply also, with this requirement.
Diameter of a sealing disc	The minimum diameter shall be 35 mm.	EN 14350-2020 (7.5)	
Boiling water resistance	All components of drinking equipment after boiling, there shall be no visual deformation or damage which causes the failure of any subsequent test (except water resistance requirement for soda-lime glass containers), or impairs the assembly for the intended use and no graduation shall have been removed when assessed by visual inspection.	EN 14350-2020 (6.4)	This requirement only applies to re-usable products.

Continued on next page

457 The tests for construction and mechanical properties shall be carried out in the order in which they are listed in this table.

Requirements for Children`s Drinking equipment			
Parameter[457]	**Requirements / Limit**	**Method**	**Notes of verification of compliance**
Volumetric labelling	- If containers are marketed with graduations these shall include the nominated maximum capacity. - The volumes shall be given in ml and the letters ml or mL shall appear at least once. - All feeding bottles, but not necessarily drinking cups, feeding bags or holders for feeding bags, shall be marked with graduations (The lowest < 60 ml; the highest: nominal capacity of the bottle) clearly visible. - If the bottle has more than one volume scale, the interval between volume scales should be less than or equal to 60 mL. - Feeding bags with graduations shall not be used to prepare formula milk.	EN 14350-2020 (7.6.1) & GB38995-2020 (4.1.1.4.1)	This requirement only applies to containers.
Volumetric accuracy	Feeding bottles and feeding cups: - all graduations ≥ 100 ml: ± 5 %. - all graduations < 100 ml: ± 5 ml. Feeding bags and holders: ± 15 %.	EN 14350-2020 (7.6.2)	This requirement only applies to containers.
Print adhesion	- After being tested all graduations, shall be readable.	EN 14350-2020 (7.6.3)	This requirement only applies to containers intended for repeated use.
	- The ink adhesion of the marked printing patterns (other than text and volume scale) should meet the requirements of level 1 in GB/T 9286.	GB38995-2020 (4.1.1.3)	
Thermal shock	No part of any container, shall crack or break.	EN 14350-2020 (7.6.4)	This requirement only applies to re-usable containers.
Resistance to compressive deformation	The diameter change rate of the plastic feeding bottle container along the compression direction shall be less than or equal to 10 %.	GB38995-2020 (4.2.1)	This requirement only applies to plastic container of feeding bottle. If the product declares that the feeding bottle is a compressible product, this requirement is not required, but the product should be equipped with a safety warning (see 7.1.5 of GB 38995).
Water resistance	The water resistance of the glass bottle body shall meet the following requirements: Soda lime glass: HGB3 Borosilicate: HGB1	GB38995-2020 (4.2.2.2)	This requirement only applies to glass container.
Internal stress	The apparent stress at the bottom of the glass bottle shall be less than or equal to level 4.	GB38995-2020 (4.2.2.3)	This requirement only applies to glass container.
Mechanical impact strength	The mechanical impact strength of the glass bottle body should be greater than or equal to 0.10J, and the allowable number of breakages for 8 samples should be less than or equal to 1.	GB38995-2020 (4.2.2.4)	This requirement only applies to glass container. Note: It is not required that the entire outer surface of the glass bottle is completely enclosed by other materials.
Tear resistance	No drinking accessories which can be punctured shall break, tear or separate.	EN 14350-2020 (7.7.1)	This requirement only applies to drinking accessories. Straws are excluded from puncturing and shall be submitted un-punctured to the tensile test.
Push-pull valve integrity after simulated use	During the cycle test the push-pull valve shall open and close. During either the cycle test or tensile strength test no part of the push-pull valve shall break, tear, or separate to form small parts.	EN 14350-2020 (7.7.2)	

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Requirements for Children`s Drinking equipment			
Parameter[457]	**Requirements / Limit**	**Method**	**Notes of verification of compliance**
Drop test	The container, the teat (or drinking accessory) and the locking ring shall not be separated. There shall be no visible breaks and cracks.	GB38995-2020 (4.1.2.7)[458]	This requirement shall not apply to glass and ceramic feeding bottles. But safety warning shall be set.
Sealing test	There shall not be any leaks.	GB38995-2020 (4.1.2.4)	This requirement shall not apply to nipples and drinking accessories.
Fitting of components	Components of the drinking equipment shall be able to be fitting correctly.	GB38995-2020 (4.1.2.1)	
Tensile strength	Any components or pieces which have become detached from the article as a result of the test shall be subject to “Small parts test”, one at a time.	16 CFR § 1500.51 or 16 CFR § 1500.52[459]	This requirement applies to any projection of a product that the child can grasp with at least the thumb and forefinger or the teeth.
Torque test			This requirement applies to any projection, part or assembly that can be griped between thumb and forefinger or with the teeth.
Size of components of drinking equipment	- Size of permanent protective cover: Permanent protective covers, while attached to the product, shall in no direction protrude through specific templates (Templates A and B) by their own weight.	EN 14350-2020 (7.8.2)	Permanent protective covers on straws are excluded from this test.
	- Size of components of feeding bottle (other than permanent protective cover): The components of the feeding bottle (including the nipple or drinking accessory) shall not protrude through specific templates (Template A/B). If the nipple or drinking accessory protrudes through the A or B templates, they should meet the requirements of “Maximum length of protrusions parts”; “Security/retention test for protrusions parts” and “Flexibility of protrusions parts”. If the component of the feeding bottle (other than nipple or drinking accessory) protrude through abovementioned templates, it should meet the requirements of “Security/retention test for protrusions parts”.	GB38995-2020 (4.1.2.6.1)	
Security of permanent protective cover	No part shall break during the test. Any part that detaches or is released during the test, shall be tested for small parts.	EN 14350-2020 (7.8.3)	
Handles and clips	When tested in accordance with 7.9.2 and visually inspected, no part of the handle or clip when assembled on the container shall break, tear or separate.	EN 14350-2020 (7.9)	If the handle or clip is detachable and is detached from the container, with breaking, tearing or separating, during the test then this shall not be deemed as a failure.
Finger traps	All accessible holes more than 10 mm deep shall not have an opening width between 5.5 mm and 12 mm.	EN 14350-2020 (7.10)	This requirement only applies to components made of materials with a Shore A hardness of more than 60.
Maximum length of protrusions parts	The maximum length of any protruding part emerging from the container shall not be greater than 100 mm when fixed in the normal position of use.	EN 14350-2020 (7.11.1)	
Flexibility of protrusions parts	The protruding part shall collapse to less than 40 mm.	EN 14350-2020 (7.11.2)	

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458 Additionally, if the article is intended to use by children ≤ 18 months of age, the impact test method 16 CFR § 1500.51 apply.

459 If the article is intended to use by:
– children ≤ 18 months of age, the method 16 CFR § 1500.51 shall be used.
– children > 18 but < 36 months of age, the method 16 CFR § 1500.52 shall be used.

Requirements for Children`s Drinking equipment				
Parameter[457]	**Requirements / Limit**		**Method**	**Notes of verification of compliance**
Security/ retention test for protrusions parts	No part of a feeding teat or drinking accessory, shall break, tear or separate from the container.		EN 14350-2020 (7.11.3)	
Cords or loops	The maximum length of a single cord shall not exceed 220 mm. If there is a loop it shall have maximum circumference of 360 mm. If loop opens when pulled with 90 N, the single cords shall each not exceed a length of 220 mm.		EN 14350-2020 (7.12)	
Volatiles compound content	The content shall not exceed 0.5 %.		EN 14350-2020 (8.4)	This requirement only applies to silicone rubber components.
Migration of certain metals	The migration of certain metals shall not exceed any the following limits:		EN 14350-2020 (8.6)	If the limit of Cr VI is below the limit of Quantification of EN 71-3, the sample is to be considered passed.
	Element	Limit (mg/kg)		
	Al	6000		
	Sb	120		
	As	10		
	Ba	4000		
	B	3200		
	Cd	3.6		
	Cr III	100		
	Cr VI	0.002		
	Co	28		
	Cu	1660		
	Pb	5.0		
	Mn	600		
	Hg	20		
	Ni	56		
	Se	100		
	Sr	12000		
	Sn	40000		
	Organic Tin	2.5		
	Zn	10000		
Migration of Formaldehyde	The migration of formaldehyde shall not exceed 0.5 mg/L.		EN 14350-2020 (8.7)	This requirement only applies to components made of rubber, silicone rubber or thermoplastic elastomers.
Migration of MBT	The migration shall not exceed 8 mg/kg.		EN 14350-2020 (8.7)	This requirement only applies to rubber components.
Antioxidant release	The migration of BHT, Cyanox 425, Antioxidant 2246, Wingstay L, Irganox 1520 and Irganox 1726 shall not exceed any of the limits in table 7 of EN14350-2020.			
Colour fastness	Components which have been coloured or printed shall not release any colourant.		EN 14350-2020 (8.8)	
Migration of primary aromatic amines	Components made of rubber or thermoplastic elastomers shall not release PAAs.		EN 14350-2020 (8.9)	LOD: 0.01 mg/kg

VI. C. 3. APPLICABLE REGULATIONS

- **European Union regulation**

– EN 14372-2004 Child use and care articles - Cutlery and feeding utensils.

– EN 14350-2020 Child use and care articles. Drinking equipment-Safety requirements and tests methods.

- **Chinese Regulation**

– ZWX/QLB0 202-2015 Safety requirements of cutlery and feeding utensils for babies and young children.

– GB 38995-2020 Infant feeding bottles and teats.

- **Japanese Regulation**

– JIS T 9112 Feeding bottles.

- **USA Regulation**

– CPSC - Small parts test 16 CFR 1501.

- **GCC Regulation**

– GSO 2164-2011 Child use and care articles. Drinking equipment - Part 1: General and physical requirements.

– GSO 2168-2011 Child use and care articles. Drinking equipment - Part 2: Test methods of general and physical requirements.

- **Israel Regulation**

– SI 14372-2010 - Child use and care articles. Cutlery and feeding utensils: Safety requirements and tests.

VII. OTHER REGULATIONS OF MANDATORY COMPLIANCE

VII. A. EU

VII. A. 1. REACH

1. What is it?

REACH is a European Union regulation that addresses the Registry, Evaluation, Authorization and Restriction of Chemicals (Regulation (EC) Number 1907/2006 of the European Parliament and Council and its amendments).

2. Is it of mandatory compliance?

REACH is a mandatory regulation for those suppliers who manufacture, distribute and/or supply to any of Inditex brands any type of product (hereinafter, "Product") intended to be commercialized in any European Union Member State.

The aforementioned Suppliers should properly control and manage any phase (their own and/ or subcontracted) of the 'Product's manufacture cycle' with the aim to: (1) detect and avoid the presence of substances included in the list 'Candidate list of Substances of Very High Concern for Authorisation'[460] in higher amounts than 0.1 % of the total weight of the "Products"; and (2) to justify the presence of SVHC to any external agency and/or the Inditex Sustainability Department.

If the mentioned SVHCs were to be detected in the 'Product' in higher amounts than the above mentioned limit before its shipment to any EU Member State, Suppliers should immediately notify their presence in the 'Product' and provide the corresponding 'Corrective Action Plan' for their appropriate elimination to the Inditex Sustainability Department."

VII. A. 2. Biocidal Products Regulation (BPR)

1. What is it?

The Biocidal Product Regulation (BPR), Regulation (EC) Number 528/2012 of the European parliament and Council and its amendments, concerns the placing on the market and use of biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms, like pests or bacteria, by the action of the active substances contained in the biocidal product.

The BPR lays down rules for the establishment at Union level of a list of active substances,[461] which may be used in biocidal products,[462] the authorisation of biocidal products and the placing on the market of treated articles.[463]

460 The article 57 of REACH defines "Substances of Very High Concern" (SVHC) as those substances that are carcinogenic, mutagenic or toxic for human reproduction (CMR 1A and CMR 1B) or those persistent, bioaccumulating and toxic substances (PBT) or those very persistent and very bioaccumulative substances (vPvB) or substances –such as those having endocrine disrupting properties– for which there is scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern to those of other substances listed above and which are identified on a case-by-case basis in accordance with the procedure set in Article 59. The SVHC candidate list is available on the ECHA website (http://echa.europa.eu/es/candidate-list-table).

461 **Active substance**: any substance or a micro-organism that has an action on or against harmful organisms. (https://echa.europa.eu/es/information-on-chemicals/biocidal-active-substances)

462 **Biocidal product**: any substance or mixture, in the form in which it is supplied to the user, consisting of, containing or generating one or more active substances with the intention of destroying, deterring, rendering harmless, preventing the action of, or otherwise exerting a controlling effect on any harmful organism by any means other than mere physical or mechanical action. Treated articles that have a primary biocidal function are considered biocidal products.

463 **Treated article**: any substance, mixture or article which has been treated with, or intentionally incorporates, one or more biocidal products.

Treated articles are divided in three categories depending on their reference to active substances and their biocidal properties:

– Treated articles with no claim or reference to biocidal properties.

– Treated articles with a claim referring to biocidal properties.

– Treated articles with no reference to biocidal properties but with approved active substances and related labelling requirements.

2. Is it of mandatory compliance?

BPR is a mandatory regulation for those suppliers that manufacture, distribute and/or supply to any of Inditex brands any type of product (hereinafter, 'Product') intended to be commercialized in any European Union Member State.

According to the BPR, biocidal products should neither be made available on the market nor used unless authorised in accordance with this Regulation. Moreover, treated articles should not be placed on the market unless all active substances contained in the biocidal products with which they were treated or which they incorporate are approved, or be under review, in accordance with this Regulation for the relevant product-type.

Therefore, the aforementioned Suppliers should properly control and manage any phase of the 'Product's manufacture cycle' (their own and/or subcontracted) with the aim to detect if the final 'Product' is treated with or intentionally incorporates any active substance. If the 'Product' can be considered a treated article, the Suppliers must: (1) label the 'Product' in accordance to the BPR; ensure its compliance with the Regulation and (2) notify the presence of active substances in the 'Product' to the Inditex Sustainability Department.

VII. A. 3. RoHS (for electrical products)

1. What is it?

RoHS (Directive 2011/65/EU and its amendments), abbreviation for "Restriction of Hazardous Substances", is a European Union directive that aims to restrict certain dangerous substances commonly used in electrical and electronic equipment.

2. Is it of mandatory compliance?

RoHS is a mandatory regulation for those suppliers who manufacture, distribute and/or supply, and sale food contact products that fall under the scope of RoHS in any of the European Union Member States. This regulation restricts the use of the following substances:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent chromium (Cr VI)
- Polybrominated biphenyls (PBB)
- Polybrominated diphenyl ether (PBDE)
- Bis(2-ethylhexyl) phthalate (DEHP)
- Butyl benzyl phthalate (BBP)
- Dibutyl phthalate (DBP)
- Diisobutyl phthalate (DIBP)

For the products that fall under the scope of RoHS, the maximum permitted concentrations are 0.1 %, or 1000 ppm, (except for cadmium, which is limited to 0.01 %, or 100 ppm) by weight of homogeneous material. This means that the limits do not apply to the weight of the finished product, or even to a component, but to any single substance that could (theoretically) be separated mechanically.

VII. B. US

VII. B. 1. California Proposition 65

1. What is it?

In 1986, California voters approved an initiative to address their growing concerns about exposure to toxic chemicals. That initiative became the Safe Drinking Water and Toxic Enforcement Act of 1986, better known by its original name of Proposition 65. It requires the State to publish a list of chemicals[464] known to cause cancer or birth defects or other reproductive harm. This list, which must be updated at least once a year, has grown to include more than 800 chemicals since it was first published in 1987.

2. Is it of mandatory compliance?

The Proposition 65 is a mandatory regulation for those suppliers who manufacture, distribute and/or supply, and sale products in the State of California.

How to meet the requirements of Proposition 65:

There are no clear limits in the proposition 65 chemicals list. However, the court decisions on Proposition 65 are collected and summarized as a guideline for the suppliers to meet the requirements. Most common substances involved in Proposition 65 related court cases are lead (Pb), cadmium (Cd) and Phthalates. Limits vary depending on the products.

Special attention must be paid to Exterior Designs[465] of ceramic or glass articles and brass handles of kitchenware.

The following table shows limits and methods needed to comply with the Inditex requirements.[466]

Part of the article	Material	Parameter		Limit	Units	Method
EXTERIOR DESIGNS	CERAMIC AND PORCELAIN ENAMEL	Metal migration	Pb	0.99	mg/L	ASTM C 927-99
			Cd	0.99	mg/L	
		Wipe test-based	Pb	1	µg	NIOSH 9100
			Cd	1	µg	
		Total content	Pb	90	mg/kg	EPA 3050
			Cd	90	mg/kg	
	GLASS AND CRYSTAL	Wipe test-based	Pb	1	µg	NIOSH 9100
			Cd	8	µg	
		Total content	Pb	90	mg/kg	EPA 3050
HANDLES	BRASS	Total content	Pb	200	mg/kg	EPA 3050B and EPA 6010B

ASTM C 927-99 method: Total immersion with results corrected for internal volume

NIOSH 9100 method: Wipe test-based standard; content of metal by weight on any surface with exterior designs.

EPA 3050 method: Total content of Pb and Cd. The percentage of lead and cadmium weight must relate only to the decorating material and must not include any quantity attributable to any non-decorating material (*e.g.* ceramic ware substrate)

EPA 3050B following of EPA 6010B method: Total content of the Pb is analyzed by digestion with an appropriate oxidant (EPA 3050B) and ICP-AES determination of the metal in the extract (EPA 6010B).

464 http://oehha.ca.gov/prop65/prop65_list/Newlist.html
465 "Exterior designs" is defined as all coloured artwork, designs and/or markings on the exterior surface of the product.
466 For further information, contact Inditex Sustainability department.

VIII. ANNEXES

ANNEX I. ALLOWED SUBSTANCES IN THE MANUFACTURE OF FCM: APPLICABLE REGULATIONS

1. POSITIVE LISTS

FCM belong to a special category of consumer products, since they may have significant and direct impact on consumers' health. According to it, and unlike most other consumer products, only a list of permitted substances can be used to manufacture food contact materials.

To comply with Inditex' requirements, all raw materials used to manufacture food contact products must be enclosed in the positive lists which are included in the regulations shown in points 2 to 10 of this annex. The acceptable limits for approved components are listed in the positive list.

2. FOOD CONTACT PRODUCTS MADE OF PLASTIC

EUROPEAN UNION

– **Commission Regulation (EU) No. 10/2011** of 14 January 2011 on plastic materials and articles intended to come into contact with food and its amendments. (Annex I and the substances included in the Article 6)

USA

United States of America Code of Federal Regulations (CFR) submitted by the US Federal Drug Administration (FDA), 21 CFR:

– **21 CFR Part 177** – Indirect food additives: polymers.

– **21 CFR Part 178** – Indirect food additives: adjuvants, production aids and sanitizers.

CHINA

– **Chinese regulation: GB 9685-2016** Hygienic Standards for use of additives in food containers and packaging materials and its amendments. – Appendix A (Table A1 and the substances included in the point A13)

– **GB 4806.6-2016** National Food Safety Standard for Plastic Resin Intended to Come into Contact with Food and its amendments.

JAPAN

– Positive List system for food utensils and containers and packaging. (Notification No. 196 of 2020)

MERCOSUR

– **MERCOSUR/GMC/RES. Nº 02/12:** "Technical Regulation on positive list for monomers, other starting substances and authorized polymers for the manufacture of plastic containers and equipment intended to become in contact with foodstuffs" and its amendments.

– **MERCOSUR/GMC/RES. Nº 05/18**: "Positive list for additives permitted in the manufacture of plastic materials and polymeric coatings intended to come into contact with foodstuffs" and its amendments.

– **MERCOSUR/GMC/RES. Nº 15/10**: "Technical Regulation on colouring agents for the manufacture of plastic containers and equipment intended to become in contact with foodstuffs" and its amendments.

GCC

– **GSO 1863:2013** on "Food packages – Part 2: Plastic package – General requirements" and its amendments.

3. FOOD CONTACT PRODUCTS MADE OF RUBBER, SILICONE AND SILICONE RUBBER

EUROPEAN UNION

– **Policy statement concerning rubber products intended to come into contact with foodstuffs**. Appendix 1: Inventory list of substances for the manufacture of rubber products intended to come into contact with foodstuffs.

FRANCE

– **Arrêté du 25 novembre 1992** relatif aux matériaux et objets en élastomères de silicone mis ou destinés à être mis au contact des denrées, prudits et boissons alimentaires.

– **Arrêté du 5 août 2020** relatif aux matériaux et objets en caoutchouc destinés à entrer encontact avec des denrées alimentaires et aux sucettes pour nourrissons et enfants en basâge.

GERMANY

– **BfR XV**. Silicones.

– **BfR XXI**. Commodities based on Natural and Synthetic Rubber.

ITALY

– **Ministerial Decree of 21 March 1973** (Italian Official Gazette 26.4.85) and its amendments.

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter III – Rubber products.**

SPAIN

– **Royal Decree 847/2011**, of 17 June, establishing the positive list of substances permitted for the manufacture of polymeric materials intended to come into contact with food.

USA

United States of America Code of Federal Regulations (CFR) submitted by the US Federal Drug Administration (FDA), 21 CFR:

– **21 CFR Part 177** – Indirect food additives: polymers.

– **21 CFR Part 178** – Indirect food additives: adjuvants, production aids and sanitizers.

CHINA

– **Chinese regulation: GB 9685-2016** Hygienic Standards for use of additives in food containers and packaging materials and its amendments.

– **GB 4806.11-2016** National Food Safety Standard for Rubber Materials Intended to Come into Contact with Food and its amendments. Appendix A (Tables A3 and A7 and the substances included in the point A13)

JAPAN

– Positive List system for food utensils and containers and packaging. (Notification No. 196 of 2020)

MERCOSUR

– **MERCOSUR/GMC/RES Nº 28/99**: "Technical regulation on positive list for elastomeric containers and equipment intended to come into contact with foodstuffs".

– **MERCOSUR/GMC/RES. Nº 15/10**: "Technical Regulation on colouring agents for the manufacture of plastic containers and equipment intended to become in contact with foodstuffs" and its amendments.

4. FOOD CONTACT PRODUCTS MADE OF METALS AND ALLOYS

FRANCE

– Recommendation DGCCRF 2004–64 and its amendments (**DM/4B/COM/001**).

ITALY

– **Ministerial Decree of 21 March 1973** (Italian Official Gazette 26.4.85) and its amendments.

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation [**Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter IV – Metals**.

MERCOSUR

– **MERCOSUR/GMC/RES. Nº 46/06** "General provisions for containers, coatings, utensils, caps and metal equipment in contact with foodstuffs".

5. FOOD CONTACT PRODUCTS MADE OF PAPER & BOARD

EUROPEAN UNION

– **ResAP (2002)** on paper and board materials and articles intended to come into contact with foodstuffs. Technical Document No. 1: List of substances to be used in the manufacture of paper and board materials and articles intended to come into contact with foodstuffs.

GERMANY

– **BfR XXXVI**. Paper and board for food contact.

ITALY

– **Ministerial Decree of 21 March 1973** (Italian Official Gazette 26.4.85) and its amendments.

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter II – Paper and cardboard**.

USA

United States of America Code of Federal Regulations (CFR) submitted by the US Federal Drug Administration (FDA), 21 CFR:

– **21 CFR Part 176** – Indirect food additives: paper and paperboard components.

CHINA

– **Chinese regulation: GB 9685-2016** Hygienic Standards for use of additives in food containers and packaging materials and its amendments. Appendix A (Table A6 and the substances included in the point A13)

MERCOSUR

– **MERCOSUR/GMC/RES. Nº 15/10**: "Technical Regulation on colouring agents for the manufacture of plastic containers and equipment intended to become in contact with foodstuffs".

– **MERCOSUR/GMC/RES. Nº 40/15**: "Technical Regulation on cellulosic containers and equipment intended to become in contact with foodstuffs". Part II: Positive list.

JAPAN

Japanese voluntary standards prepared by Japanese trade associations:

– **Japanese Paper Association (JPA)**.

6. FOOD CONTACT PRODUCTS MADE OF WOOD

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter IX – Wood and cork.**

7. FOOD CONTACT PRODUCTS MADE OF NATURAL MATERIALS (CORK)

EUROPEAN UNION

– **ResAP (2004) 2** on cork stoppers and other cork materials and articles intended to come into contact with foodstuffs.

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter IX – Wood and cork.**

8. FOOD CONTACT PRODUCTS WITH ORGANIC COATINGS

EUROPEAN UNION

– **Commission Regulation (EU) No. 10/2011** of 14 January 2011 on plastic materials and articles intended to come into contact with food – Annex I and its amendments.

– **ResAP (2004)** on coatings intended to come into contact with foodstuffs. Technical Document No.1: List of substances to be used in the manufacture of coatings intended to come into contact with foodstuffs.

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter X – Coatings.**

SPAIN

– **Royal Decree 847/2011**, of 17 June, establishing the positive list of substances permitted for the manufacture of polymeric materials intended to come into contact with food.

USA

United States of America Code of Federal Regulations (CFR) submitted by the US Federal Drug Administration (FDA), 21 CFR:

– **21 CFR Part 175 –** Indirect food additives: adhesives and components of coatings.

CHINA

– **Chinese regulation: GB 9685-2016** Hygienic Standards for use of additives in food containers and packaging materials and its amendments.

– **GB 4806.10-2016** National Food Safety Standard for Paint and Coating Intended to Come into Contact with Food and its amendments. Appendix A (Table A2 and the substances included in the point A13)

MERCOSUR

– **MERCOSUR/GMC/RES. Nº 05/18**: "*Positive list for additives permitted in the manufacture of plastic materials and polymeric coatings intended to come into contact with foodstuffs"*and its amendments.

JAPAN

– Positive List system for food utensils and containers and packaging. (Notification No. 196 of 2020)

9. ADHESIVES

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter X – Coatings.**

SPAIN

– **Royal Decree 847/2011** establishing the positive list of substances permitted for the manufacture of polymeric materials intended to come into contact with food.

USA

United States of America Code of Federal Regulations (CFR) submitted by the US Federal Drug Administration (FDA), 21 CFR:

– **21 CFR Part 175 –** Indirect food additives: adhesives and components of coatings.

CHINA

– **Chinese regulation: GB 9685-2016** Hygienic Standards for use of additives in food containers and packaging materials and its amendments. Appendix A (Table A5 and the substances included in the point A13).

MERCOSUR

– **MERCOSUR/GMC/RES. Nº 27/99**: "Technical Regulation on adhesives to be used in the manufacture of packaging equipment intended to become in contact with foodstuffs".

10. FOOD CONTACT PRODUCTS MADE OF TEXTILE

EUROPEAN UNION

– **Commission Regulation (EU) No. 10/2011** of 14 January 2011 on plastic materials and articles intended to come into contact with food – Annex I and its amendments.

– **Directive 2007/42/EC** of 27 June 2007 relating to materials and articles made of regenerated cellulose film intended to come into contact with foodstuffs and its amendments.

NETHERLANDS

– Commodities Act Regulation on packaging and consumer articles coming into contact with foodstuffs Regulation **[Warenwetregeling verpakkingen en gebruiksartikelen]. Chapter VII – Textile products.**

ANNEX II. INDITEX MANUFACTURING POSITIVE LIST FOR FOOD CONTACT MATERIALS

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1. INTRODUCTION

Food Contact Materials belong to a special category of consumer products, since they may have significant and direct impact on consumers' health. Therefore, unlike most of consumer products, only a list of permitted substances (hereinafter, positive list) can be used to manufacture food contact materials and articles made of plastic.

Most countries have developed their own positive lists. For example, the European Union has a list of permitted monomers, additives and some polymer production aids for the manufacture of plastic materials; on the other hand, the Chinese regulation has a list of permitted plastic resins and another list of permitted additives for the manufacture of FCM made of plastic materials and articles.

Recognizing the importance of selecting the appropriate raw materials to comply with the FCM worldwide regulations and thus, with the product health and safety standard "*Inditex Precautions and limits for Users Safety for Food Contact Materials"* (i+FCM), Inditex has taken steps to provide the "*Inditex Manufacturing Positive List for Food Contact Materials"* to its suppliers, an essential tool to comply with the i+FCM Standard.

Inditex has made all reasonable efforts to ensure the accuracy of all the information provided in this Manufacturing Positive List. However, the information contained in, or accessed through, this annex is provided by Inditex for general guidance purposes only and it should not be considered or used as a substitute for any legal requirement. It is the Supplier's responsibility to comply with the applicable regulations of the countries where Inditex commercializes its products.

The Inditex Manufacturing Positive List for Food Contact Materials will be periodically updated in order to take into consideration the latest regulatory amendments. In addition, Inditex may consider including additional records to ensure comprehensive coverage of all types of food contact materials. Thus, the supplier is responsible for always referring to the latest updated version of this document available at www.inditex.com or Inditex' Supplier Extranet.

2. SCOPE OF THE MANUFACTURING POSITIVE LIST

The Inditex Manufacturing Positive List for Food Contact Materials is of general application for:

- food contact materials and articles and parts thereof consisting of plastics;
- food contact materials and articles and parts thereof consisting of silicones;
- food contact materials and articles and parts thereof consisting of uncoated metals & alloys; and
- food contact materials and articles that are covered by a natural coating.

In addition, the Inditex Manufacturing Positive List for plastic materials shall be used as a reference for food contact articles with organic coatings and/or paints.

To comply with Inditex requirements, all raw materials that are not mentioned in this Manufacturing Positive List shall not be used in the manufacture of food contact materials and articles made of plastic, silicone and/or metals & alloys. Furthermore, all waxes and oils used to cover food contact materials and articles shall be included in this Manufacturing Positive List. The restrictions and acceptable limits for the approved components are specified in the Manufacturing Positive List. If you, as an Inditex supplier, are using or intend to use substances not mentioned in this Manufacturing Positive List, please contact Inditex Sustainability department (i+fcm@inditex.com) to get further information on how to achieve compliance of your products with Inditex requirements for Food Contact Materials.

3. MANUFACTURING POSITIVE LIST INTERNAL STRUCTURE

The Inditex Manufacturing Positive List for Food Contact Materials encloses the following information:

a) Food contact products made of plastic

Part 5 of this annex on the INDITEX MANUFACTURING POSITIVE LIST FOR FOOD CONTACT MATERIALS MADE OF PLASTIC includes the following positive lists that are mandatory for those suppliers who manufacture, distribute and/or supply to any Inditex brands any type of food contact material or article made of plastic:

- **Polymers positive list:** It contains a list of the permitted polymeric resins for the manufacture of plastic articles.
- **Monomers positive list:** It contains a list of the permitted monomers for the manufacture of polymeric resins intended to be used as base materials in the manufacture of food contact articles.
- **Additives positive list** (including polymer production aids): It contains a list of the permitted additives for the manufacture of polymeric resins intended to be used as base materials in the manufacture of food contact articles.
- **Colorants positive list:** It contains a list of permitted colorants for the manufacture of plastic materials and articles.

b) Food contact products made of silicone

Part 6 on INDITEX Manufacturing Positive List for Food Contact Materials Made of Silicone includes the following positive lists that are mandatory for those suppliers who manufacture, distribute and/or supply to any Inditex brands any type of food contact material or article made of silicone:

- **Starting materials positive list:** It contains a list of the permitted starting materials for the manufacture of silicone articles.
- **List of monomers, additives and other substances used for the manufacture of silicone articles:** It contains a list of permitted substances (other than starting materials) used for the manufacture of silicone articles.
- **Colorants:** It contains some restrictions applicable to colorants used in the silicone materials.

c) Food contact products made of uncoated metals and alloys

Part 7 of this annex on the Inditex Manufacturing Positive List for Food Contact Materials Made of Uncoated Metals & Alloys includes:

- A **list of recommended aluminium and aluminium alloys grades** that all suppliers are encouraged to use in order to achieve the Inditex overall requirements for food contact materials and articles made of aluminium.
- A **list of permitted stainless steel grades** that is mandatory for those suppliers who manufacture, distribute and/or supply to any Inditex brands any type of food contact material or article made of stainless steel.

d) Food contact products with natural coatings

Part 8 of this annex on the Inditex Manufacturing Positive List for Food Contact Materials Made with natural coatings[467] contains the following positive lists that are mandatory for those suppliers who manufacture, distribute and/or supply to any Inditex brands any type of food contact material or article that is covered with a natural coating:

- **Waxes positive list**
- **Oils positive list**

467 See definition in Annex III.

4. MANUFACTURING POSITIVE LIST IMPLEMENTATION

Implementation and enforcement of the Manufacturing Positive List throughout the entire supply chain will take place following the instructions detailed below:

a) Food contact products made of plastic

i. Food contact products made of plastic manufactured for any Inditex brand shall only be made of the polymeric resins listed in the *'polymers positive list',* enclosed in part 5a) of this annex.

ii. The polymeric resins used in the manufacture of food contact products made of plastic manufactured for any Inditex brand shall only be made of the monomers listed in the *'monomers positive list'*, enclosed in part 5b) of this annex.

iii. The Supplier shall only use the additives included in the *'additives positive list'*, enclosed in part 5c) of this annex, for the manufacture of food contact materials or articles made of plastic. The additives to be used shall be approved for the manufacture of the specific plastic material and the maximum amount of additive used in the production process shall fulfil the requirements specified in the *'additive positive list'.* Please note that the polymers included in this positive list shall only be used as additives and cannot be used as base materials unless they are enclosed in the 'polymers positive list' too.

iv. The Supplier shall only use the colorants included in the *'colorant positive list'*, enclosed in part 5d) of this annex, for the manufacture of food contact materials or articles made of plastic. The colorants to be used shall be approved for the manufacture of the specific plastic material and maximum amount of colorant used in the production process shall fulfil the requirements specified in the *'colorant positive list'.*

v. Food contact products made of plastic manufactured according to the instructions established in this point, shall comply with the provisions specified in the sections V. A. 1 or V. B. 1 of this Product Health and Safety Standard.

vi. Without prejudice to point v), the Supplier shall comply with the specific migration limits (SML), the total specific migration limits [SML(T)], the maximum residue quantity (QMA) and any other restriction and/or requirement specified in parts 5a) to 5d of this annex.

vii. In the case that a food contact product contains any substance not listed in the Manufacturing Positive list or a substance listed in the Manufacturing Positive list not compliant with the restrictions mentioned in point v) and vi), they cannot be used in Inditex productions.

viii. Please note that this Manufacturing Positive List catalogues chemical substances listed by CAS Number and/or chemical name. Some chemical substances may not have an associated CAS Number [*e.g.* di-n-octyltin 1,4-butanediol bis(mercaptoacetate)]. In addition, this Manufacturing Positive List includes group of substances for which listing individual substances is not practical [*e.g.* neodecanoic acid, salts].

b) Food contact products made of silicone

i. Food contact products made of silicone manufactured for any Inditex brand shall only be made of the following substances:

- The substances included in the *'Starting materials positive list'* enclosed in part 6 a) of this annex.
- The substances included in the *'Monomers, additives and other substances positive list'* enclosed in part 6 b) of this annex.
- The colorants compliant with the restrictions established in section 6 c) of this annex on *'Colorant purity requirements'.*
- The substances listed in Annex I of Commission Regulation (EC) No. 10/2011 and its amendments with the restrictions of use contained therein.

- Polymer production aids that are neither intended to be present in the final materials or articles nor have a physical or chemical effect in the final material or article.

- Substances lawfully used according to the Member States of the European Union, the European Free Trade Area, the European Economic Area and in countries having a European Union Association Agreement. In case a food contact product is manufactured using a substance that is clustered in this point, the Supplier shall notify it to the Inditex Sustainability Department.

ii. Food contact products made of silicone manufactured according to the instructions established in this point, shall comply with the provisions specified in the sections V. A. 2 or V. B. 1 of this Product Health and Safety Standard.

iii. Without prejudice to point ii), the Supplier shall comply with the specific migration limits (SML), the total specific migration limits [SML(T)], the maximum residue quantity (QMA) and any other restriction and/or requirement specified in parts 6a) to 6c of this annex.

c) Food contact products made of uncoated metals & alloys

i. To comply with Inditex requirements, suppliers manufacturing for any Inditex brand food contact products made of aluminium and aluminium alloys are encouraged of using the grades listed in the *'recommended aluminium and aluminium alloys grades'* list, enclosed in part 7 a) of this annex.

ii. To comply with Inditex requirements, suppliers manufacturing for any Inditex brand food contact products made of stainless steel shall only use the grades listed in the *'list of permitted stainless steel grades'*, enclosed in part part 7 b) of this annex.

iii. Food contact products made of metals and alloys manufactured according to the instructions established in this point, shall comply with the provisions specified in the sections V. A. 4 or V. B. 3 of this Product Health and Safety Standard.

d) Food contact products with natural coatings

To comply with Inditex requirements, suppliers manufacturing for any Inditex brand food contact products covered with natural coatings shall only use the waxes and oils listed part 8 of this annex.

Please note that these types of coatings are not considered functional barriers and are used only to protect and preserve the surface of the substrates on which the wax or oil is applied.

5. INDITEX MANUFACTURING POSITIVE LIST FOR FOOD CONTACT MATERIALS MADE OF PLASTIC

a) Polymers positive list

Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
-	**Acrylonitrile-butadiene-styrene**	ABS	Acrylonitrile: nd; Butadiene: nd [or QMA: 1 mg/kg]			**Japan:** The usage temperature shall not exceed 100ºC.	3	
-	**Copolymer of styrene homopolymer and butadiene**	PS	Butadiene: nd [or QMA: 1 mg/kg]; Ethylbenzene (QMA): 0.3 %; Styrene (QMA): 0.5 %			**China:** Loss on drying (100ºC, 3 h) ≤ 0.2 % Volatile matter ≤ 1.0 %; n-hexane extract (reflux, 2 h) ≤ 1.5 %		Japan
-	**Graft polymer of polymer of terephthalic acid, 1,4-butanediol, fumaric acid, ethylene glycol, adipic acid and styrene-butanedioic acid monomethyl ester polymer**	Modified PBT		30 (expressed as butanediol); 7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	2; 28; 30	**China:** Only to be used in contact with fatty foodstuffs. **Japan:** The maximum temperature for use in contact with milk, dairy products and alcoholic beverages shall be ≤ 70ºC. The total of hydroxy group, epoxy group, etc. (excluding the cross-linking agent) should be 3 mol or less per 1 mol of carboxy group.	1	
-	**Melamine formaldehyde resin**	MF	Melamine: 2.5	15 (expressed as formaldehyde)	15	**China:** When it is used to produce the plastic materials and articles intended to contact infant foodstuffs, the specific migration limit of melamine is 1mg/kg; the produced materials or articles shall not be used for microwave heating. **Japan:** Formaldehyde reacted with 1 mol of melamine shall be 3 mol or less.	2	
-	**Polyethylene (*i.e.* ethylene homopolymer)**	PE				**China:** Loss on drying (100ºC, 2 h) ≤ 0.15 %; Residue on ignition ≤0.20 %; n-hexane extract (reflux, 2 h) ≤ 2.00 %.	5	

Continued on next page

468 Each resin is classified into a determined resins category (Resin categories: 1 to 7). If the used resin has not an assigned category number its use is not allowed in some market.

Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
-	**Polyethylene terephthalate resin**	PET	Antimony: 0.04	30 (expressed as ethyleneglycol); 7.5 (expressed as terephthalic acid)	2; 28	**China:** Water extract (reflux, 0.5 h) ≤ 0.5 %; 65 % EtOH extract (reflux, 2 h) ≤ 0.5 %; 4 % HOAc extract (reflux, 0.5 h) ≤ 0.5 %; n-hexane extract (reflux, 1 h) ≤ 0.5 %; Pb (4 % HOAc, reflux for 0.5 h) ≤ 1 mg/kg	7	
-	**Polymer of 4,4'-isopropylidene diphenol (*i.e.* bisphenol A) and (chloromethyl) oxirane and polymer of methacrylic acid, maleic anhydride and tolylene diisocyanate**	Bisphenol A epoxy resin	Polymer of 4,4'-isopropylidene diphenol (*i.e.* bisphenol A) and (chloromethyl) oxirane: nd [or (QMA: 1 mg/kg)]; 4,4'-isopropylidene diphenol (bisphenol A): 0.6; Toluene diisocyanate (mixture of 2,4-position and 2,6-position) (QMA): 1mg/kg	30 (expressed as maleic acid); 6 (expressed as methacrylic acid)	3; 23	**China:** It shall not be used for the production of baby food contact materials and articles		Japan
-	**Polymer of 4,4'-isopropylidene diphenol (*i.e.* bisphenol A) and carbonyl dichloride or diphenyl carbonate**	PC	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; Free phenol, backflow of distilled water, 6 h: 0.05			**China:** It shall not be used for the production of baby food contact materials and articles. The produced materials or articles shall not be used to contact the food with ethanol content of more than 20 %. Water extract (reflux, 6 h) ≤15 mg/L; 20 % EtOH extract (reflux, 6 h) ≤15 mg/L; 4 % HOAc extract (reflux, 6 h) ≤15 mg/L; n-hexane extract (reflux, 6 h) ≤15 mg/L; $KMnO_4$ consumption (water, reflux, 6 h) ≤ 10 mg/L: Heavy metal (as Pb) (4 % HOAc, reflux, 6 h) ≤ 1.0 mg/L.	1	
-	**Polymer of dimethyl terephthalate, 1,4-butanediol, adipic acid, and hexamethylene diisocyanate**	PBT (biode gradable resin)	Hexamethylene diisocyanate, expressed as isocyanato (QMA): 1 mg/kg	7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** The usage temperature shall not exceed 100ºC.		Japan
-	**Polymer of dimethyl terephthalate, 1,4-butanediol, sebacic acid, and hexamethylene diisocyanate**	PBT (biode gradable resin)	Hexamethylene diisocyanate, expressed as isocyanato (QMA): 1 mg/kg	7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** The usage temperature shall not exceed 100ºC.		Japan

Continued on next page

Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
-	**Polypropylene (*i.e.* propylene homopolymer)**	PP				**China:** n-hexane extract (reflux, 2 h) ≤ 2 %	6	
-	**Polyvinyl chloride**	PVC	Vinyl chloride: nd [or QMA: 1 mg/kg]; 1,1-dichloroethane: nd [or QMA: 5 mg/kg]				4	
-	**Unsaturated polyester resin**	UP	Resin template, styrene (QMA): 0.2 %			**Japan:** The maximum temperature for use in contact with milk, dairy products and alcoholic beverages shall be ≤ 70°C.	1	
0009002-84-0	**Polytetrafluoroethylene (*i.e.* tetrafluoroethylene homopolymer)**	PTFE	Tetrafluoroethylene: 0.05			**China:** The usage temperature shall not exceed 250°C.	1	
0009002-89-5	**Vinyl alcohol homopolymer (polyvinyl alcohol)**	PVA or PVOH	Vinyl acetate: 12			**China:** Only for contact with fatty foodstuffs with low water content and dry solid food. The usage temperature shall not exceed 100°C. **Japan:** The usage temperature shall not exceed 100°C.	3	
0009003-28-5	**Poly-1-butene**	PB-1				**Japan:** The usage temperature shall not exceed 100°C.	2	
0009003-54-7	**Acrylonitrile-styrene copolymer**	AS	Acrylonitrile: nd			**Japan:** The usage temperature shall not exceed 100°C. Styrene should be at least 50 % of the final base polymer component.	3	
0009003-55-8	**Polymer of styrene and 1,3-butadiene**	PS	2-methyl-1,3-butadiene (*i.e.* isoprene): nd [or QMA: 1 mg/kg]; 1,3-butadiene: nd [or QMA: 1 mg/kg]			**Japan:** The usage temperature shall not exceed 100°C. The maximum temperature can be ≥ 101°C when it is mixed with the styrene-methyl methacrylate copolymer of Synthetic Resin Category 2 at 49 % or less.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0009006-26-2	**Polymer of ethylene and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0009008-66-6/ 0009011-52-3/ 0006422-99-7	**Polyamide 610**	PA	1,6-hexanediamine: 2.4				3	
0009010-76-8	**2-Propenenitrile, polymer with 1,1-dichloroethene**	PVDC	Vinylidene chloride: nd; Acrylonitrile: nd			**China:** Production of materials and products and food contact temperature shall not exceed 120ºC.	3	
0009010-77-9	**Polymers of ethylene and acrylic acid (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0009010-79-1	**Ethylene, polymer with propylene and 1,4-butanediol dimethacrylate**		1,4-butanediol dimethacrylate: 0.05			**China:** Use of the material food contact plastic materials and products shall not exceed the thickness of 100µm, the usage of temperature shall not exceed 100ºC.	5	
0009010-79-1	**Polymer of propylene and ethylene (where the propylene has the largest mass fraction)**	PP	5-ethylidene-2-norbornene: 0.05	30 (expressed as maleic acid)	3	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	6	

Continued on next page

Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0009010-79-1	**Polymers of ethylene and propylene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	
0009010-86-0	**Polymers of ethylene and ethyl acrylate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0009010-88-2	**Copolymer of methyl methacrylate and ethyl acrylate**	PMMA		6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	22; 23			Japan
0009010-92-8	**2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene**	PS	Styrene (QMA): 0.5 %	6 (expressed as methacrylic acid)	23	**China:** Production of materials and products and food contact temperature shall not exceed 121°C. **Japan:** the styrene shall be 50 % or more of the base polymer constituents.	See note[469]	
0009010-94-0	**Copolymer of methyl methacrylate and butadiene, styrene and acrylonitrile**	ABS	Acrylonitrile: nd; Butadiene: nd [or QMA: 1 mg/kg]	6 (expressed as methacrylic acid)	23	**Japan:** The usage temperature shall not exceed 100°C.	3	
0009011-06-7	**Vinylidene chloride-vinyl chloride copolymer**	PVDC	1,1-dichloroethylene: nd [or QMA: 5 mg/kg]; Vinyl chloride: nd [or QMA: 1 mg/kg]				4	
0009011-14-7	**Polymethylmethacrylate**	PMMA		6 (expressed as methacrylic acid)	23	**Japan:** The usage temperature shall not exceed 100°C.	3	

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469 Category 2 - Methacrylic acid should be less than 10 % of the base polymer constituents.
Category 3 - Methacrylic acid must be 10 % or more of the base polymer constituents.

Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0009011-87-4	**Methylmethacrylate-methylacrylate copolymer**	PMMA		6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	22; 23	**China:** Plastic materials and articles manufactured using this resin shall not enter in contact with alcoholic foodstuffs. The usage temperature shall not exceed 100ºC. At temperatures below 70ºC, the contact time shall not be limited. At temperatures between 70 and 100ºC the contact time shall not exceed 15 minutes. **Japan:** The usage temperature shall not exceed 100ºC. Methyl methacrylate should be 50 % or more of the base polymer constituents.	3	
0009019-29-8	**Polymers of ethylene and 1- butene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05 Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	
0009051-89-2	**Polylactic acid**	PLA				**China:** The usage temperature shall not exceed 100ºC. **Japan:** The usage temperature shall not exceed 100ºC. D-lactic acid should be 6 % or less based on the constituents of the base polymer. The maximum temperature shall be ≥ 101ºC when used in a mixture of 49 % or less with respect to the mixture of styrene homopolymer and styrene-modified 1,3-butadiene homopolymer. Includes those cross-linked with 0.3 % or less of ethylene glycol dimethacrylate.	3	
0009069-93-6	**Polymer of dimethyl terephthalate and 2,2,4 (*i.e.* 2,4,4)-trimethyl-1,6-hexanediamine**	PA	Penicillamine (QMA): 5 mg/6 dm^2					Japan

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0009078-71-1	**Polymer of dimethyl terephthalate, 1,4-butanediol and hydroxypoly (oxy-1,4-butanediyl)**	Modified PBT thermoplastic elastomer (TPE)	Tetrahydrofuran: 0.05	5 (expressed as 1,4-butanediol)	30	**China:** When used as polyester elastomer it shall only be used in contact with dry solid food.	1	
0009078-71-1	**Polymer of dimethyl terephthalate, 1,4-butanediol and α-hydro-w-hydroxy poly (1,4-butanediol)**	TPC- ET	Tetrahydrofuran: 0.6; Sum of trimellitic acid and trimellitic anhydride (QMA): 5 mg/kg	7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** It shall not be used in contact with foodstuffs with alcoholic content higher than 8 %. The usage temperature shall not exceed 66ºC.	3	
0009086-55-9	**Polymer (polyester elastomer) of dimethyl isophthalate, 1,4-butanediol, terephthalic acid and poly (1,4-butanediol)**	TPC- ET	Tetrahydrofuran: 0.6	7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** Only to be used in contact with dry solid food without grease on the surface. **Japan:** The usage temperature shall not exceed 100ºC. When used for packaging of milk and dairy products, it shall not be used on parts that come into contact with food.	3	
0009086-55-9	**Polymer of dimethyl isophthalate, 1,4-butanediol, terephthalic acid and poly (1,4-butanediol)**	PBT		7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** The usage temperature shall not exceed 121ºC. **Japan:** The usage temperature shall not exceed 100ºC. When used for packaging of milk and dairy products, it shall not be used on parts that come into contact with food.	3	
0024937-78-8	**Ethylene-vinylacetate copolymer**	EVA	Vinyl acetate: 12				2	
0024937-78-8	**Polymers of ethylene and vinyl acetate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05 Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0024937-79-9	**Polyvinylidene fluoride (*i.e.* Vinylidene fluoride homopolymer)**	PVDF	Vinylidene fluoride: 5			**China:** The manufactured materials and products shall not be exposed to strong alkaline substances.	3	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0024938-04-3	**Diethylene glycol-isophthalic acid-modified polyethylene terephthalate copolymer; condensation by terephthalic acid, ethylene glycol and isophthalic acid**	PET	Antimony: 0.04	30 (expressed as ethylene glycol); 5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	2; 27; 28	**Japan:** It is possible to polymerize trimellitic anhydride in an amount of 1 mol % or less with respect to the acid component, except when it is used in contact with dairy products.	7	
0024968-12-5	**Polybutylene terephthalate, poly(oxo-1,4-butenyloxycarbonyl-1,4-phenylenecarbonyl)**	PBT		7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30		1	
0024968-80-7	**Polymer of methyl acrylate, 1,1- dichloroethylene and acrylonitrile**	PVDC	1,1-dichloroethylene: nd [or QMA: 5 mg/kg] Acrylonitrile: nd	6 (expressed as acrylic acid)	22		4	
0024969-25-3	**Polymer of 1,3,5-trioxane and ethylene oxide**	POM	Trioxymethylene: 5; 1,3-dioxolane: 5; 1,4-bis(2,3-epoxypropoxy) butane, expressed as epoxy group (QMA): 1 mg/kg			**China:** The usage temperature shall not exceed 121ºC. **Japan:** The usage temperature shall not exceed 100ºC. The oxirane content should be 6 % or less based on the constituents of the base polymer.	1	
0024969-26-4	**Polymer of 1,3,5-trioxane and 1,3-dioxolane**	POM	Trioxymethylene: 5; 1,3-dioxolane: 5; 1,4-bis(2,3-epoxypropoxy) butane, expressed as epoxy group (QMA): 1 mg/kg			**China:** The usage temperature shall not exceed 121ºC. **Japan:** The usage temperature shall not exceed 100ºC. The content of 1,3-dioxolane should be 6 % or less based on the constituents of the base polymer.	1	
0024993-04-2	**Polymer of caprolactam and iminohexamethylene imino adipoyl**	PA	1,6- hexamethylenediamine: 2.4	15 (expressed as caprolactam)	4	**Japan:** Caprolactam must be 50 % or more of the base polymer constituents.	3	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025034-86-0	**2-Propenoic acid, 2-methyl, methyl ester, polymer with ethenylbenzene**	PS		6 (expressed as methacrylic acid)	23	**China:** Styrene content > 50 %. **Japan:** Methyl methacrylate should be 20 % or more and less than 50 % of the final base polymer constituents. Styrene should be at least 20 % of the final base polymer constituents. The total of methyl methacrylate and styrene should be 60 % or more based on the final base polymer constituents	2	
0025038-32-8	**Polymer of styrene and 2-methyl-1,3-butadiene,**	PS	2-methyl-1,3-butadiene (*i.e.* isoprene): nd [or QMA: 1 mg/kg] 1,3-butadiene: nd [or QMA: 1 mg/kg]				2	
0025038-36-2	**Polymers of ethylene, propylene and 5-ethylidene-2-norbornene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** It shall not be used in contact with oil/fatty and milk and milk products.	2	
0025038-59-9	**Diethylene glycol-isophthalic acid-modified polyethylene terephthalate copolymer; condensation by terephthalic acid and ethylene glycol**	PET	Antimony: 0.04	30 (expressed as ethylene glycol); 5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	2; 27; 28		7	
0025038-72-6	**Polymer of 1,1-dichloroethene and methyl acrylate**	PVDC	1,1-dichloroethene: nd [or QMA: 5 mg/kg]	6 (expressed as methylacrylate)	22		4	
0025038-74-8	**Polyamide 12**	PA	Laurolactam: 5				3	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025038-91-9	**1,4-Benzenedicarhoxylic acid polymer with 1,4-cyclohexanedimethanol and 1,2-ethanediol (*i.e.* PETG)**	PET	1,2-ethanediol: 30; 1,4-Phthalic acid: 7.5			**China:** If 1.1,4-bis-(hydroxymethyl)-cyclohexane accounts for the 1 % -34 % (molar) of the total diol units: – Materials and articles manufactured with this resin shall not be used in contact with carbonated beverages and beers with an alcoholic content above 25 %. – Hot fill shall not exceed 82.2ºC, storage temperature shall not exceed 48.9ºC and containers shall not be used for heat treatment. If 2.1,4-bis-(hydroxymethyl)-cyclohexane accounts for the 35 % -80 % of the total diol units: – Materials and articles manufactured with this resin shall not be used in contact with foodstuffs with an alcoholic content above 13 % at temperatures above 100ºC. – Materials and articles manufactured with this resin shall not be used in contact with foodstuffs with an alcoholic content above 25 % at room temperature or below. **Japan:** The usage temperature shall not exceed 100ºC. Do not use for alcoholic beverages with alcohol concentration higher than 25 %. Do not use above 70ºC for alcoholic beverages with alcohol concentration over 13 %.	See note[470]	
0025052-77-1	**Diethylene glycol-isophthalic acid-modified polyethylene terephthalate copolymer; condensation by terephthalic acid, ethylene glycol and diethylene glycol**	PET	Antimony: 0.04	30 (expressed as ethylene glycol); 5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	2; 27; 28		7	

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470 Category 7- If the concentration of 1,4-Cyclohexanedimethanol is less than 50 mol % with respect to the alcohol component.
Category 3 - If the concentration of 1,4-Cyclohexanedimethanol is 50 mol % or more with respect to the alcohol component.

Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025053-13-8	**Polymer of adipic acid, caprolactam, 1,6-hexamethylenediamine and 4,4'-methylenebis (cyclohexylamine)**	PA	1,6-hexamethylenedia mine: 2.4; 4,4'-methylenebis cyclohexylamine: 0.05	15 (expressed as caprolactam)	4			Japan
0025053-53-6	**Polymers of ethylene and methacrylic acid (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0025054-06-2	**Polymer of cyclohexanone and formaldehyde**	POM		15 (expressed as formaldehyde)	15			Japan
0025067-11-2	**Polyfluoroethylene-propylene resin; copolymer of tetrafluoroethylene and hexafluoropropylene**	FEP	Tetrafluoroethylene: 0.05 Hexafluoropropylene: 0.01				1	
0025087-34-7	**1-Butene, polymer with ethene (*i.e.* 1-Butene/ethene copolymer)**	PB-1				**China:** Ethylene monomer not more than 9.5 % w/w. **Japan:** One or more kinds of 1-alkene can be used. 1-alkene must be less than 50 % based on the base polymer constituents. 1-alkene with C = 11 or more must be 10 % or less based on the constituents of the base polymer.	2	
0025087-34-7	**Polymers of ethylene and 1- butene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3 Octylene: 15 Vinyl acetate: 12 Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05 Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025103-74-6	**Polymers of ethylene and methyl acrylate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05 Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0025120-29-0	**2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,1-dichloroethene**	PVDC	Vinylidene chloride: nd	6 (expressed as methacrylic acid)	23	**China:** Production of materials and products and food contact temperature shall not exceed 120ºC.	4	
0025133-97-5	**Copolymer of methacrylic acid, ethyl acrylate and methyl methacrylate**	PMMA		6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	22; 23		1	
0025134-01-4	**Polyethylene oxide (2,6-dimethyl-1,4-phenylene) resin**	PPE	2,6-dimethylphenol: 0.05				1	
0025154-01-2	**Polymer of 4,4'-isopropylidene diphenol (*i.e.* bisphenol A) and 1, 1'-sulphonyl-bis (4-chlorobenzene)**	PSU	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; 1,1'-sulphonyl-bis (4-chlorobenzene): 0.05			**China:** The usage temperature shall not exceed 121ºC. It shall not be used for the production of baby food contact materials and articles.	1	
0025155-83-3	**1-Decene, polymer with 4-methyl-1-pentene**	PMP	4-methyl-1-pentene: 0.05; 1-decene: 0.05			**China:** The amount of 4-methyl-1-pentene material is not less than 95 % by mole. **Japan:** One or more kinds of 1-alkene can be used. 1-alkene with C = 2 to 5 is 10 mol % or less based on the constituents of the base polymer. The 1-alkene with C = 6 to 10 should be 8 mol % or less based on the constituents of the base polymer. 1-alkene with C = 12 to 18 is 3 mol % or less based on the constituent components of the base polymer.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025213-02-9	**Polymers of ethylene and 1- hexene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	
0025213-96-1	**Polymer of 4-methyl-1-pentene and ethylene**	PMP	4-methyl-1-pentene: 0.05				5	
0025214-85-1	**Polymer of 1,3-dioxepane and 1,3,5-trioxane**	POM	1,3-dioxepane: nd [or QMA: 0.05 mg/6 dm^2] Trioxymethylene: 5	15 (expressed as formaldehyde)	15	**China:** The usage temperature shall not exceed 121ºC. **Japan:** 1,3-Dioxacycloheptane should be 6 % or less based on the constituents of the base polymer.	1	
0025231-38-3 / 0009002-81-7	**Polyoxymethylene**	POM		15 (expressed as formaldehyde)	15	**China:** The usage temperature shall not exceed 121ºC.	2	
0025308-54-4	**Polycaprolactam (*i.e.* polyamide 6)**	PA		15 (expressed as caprolactam)	4		3	
0025608-26-8	**Polymers of ethylene, methacrylic acid and sodium hydroxide (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	3	
0025608-33-7	**Polymer of 2-methyl-2-acrylic acid and 2-methyl-2-methylacrylate**	PMMA		6 (expressed as methacrylic acid)	23	**Japan:** The usage temperature shall not exceed 70ºC when used for milk, dairy products and alcoholic beverages.	1	
0025608-64-4 / 0025839-81-0	**Polymer of 4,4'-biphenyldiol and 1,1'-sulphonyl bis (4-chlorobenzene)**	PPSU	4,4'-biphenyldiol: 6; 1,1'-sulphonyldi-(4-chlorobenzene): 0.05				1	
0025667-42-9 / 0025608-63-3	**Polymer of (oxy-1,4-phenylsulphenyl -1,4-phenylene) polymer, 4,4'-sulphonyldiphenol (bisphenol S) and 1,1'-sulphonylbis (4-chloro Benzene)**	PESU	4,4'-sulphonyldiphenol (*i.e.* bisphenol S): 0.05; 4,4'-dichlorodiphenylsulphone: 0.05				1	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025702-94-7	**Polymers of ethylene, acrylic acid and lithium salt (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0025718-70-1	**Polymer of adipic acid and m-xylylenediamine**	PA	m-xylylenediamine: 0.05				3	
0025722-45-6	**Polymer of propylene and maleic anhydride (propylene has the largest mass fraction)**	PP	5-ethylidene-2-norbornene: 0.05	30 (expressed as maleic acid)	3	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	6	
0025750-23-6	**Polymer of isophthalic acid and terephthalic acid and 1,6-hexamethylenediamine**	PA	1,6-hexamethylenediamine: 2.4	5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	27; 28		3	
0025750-82-7	**Polymers of ethylene, acrylic acid and sodium salt (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Do not use for milk and dairy products.	3	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0025750-84-9	**Polymers of ethylene and butyl acrylate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Do not use for milk and dairy products.	2	
0025776-72-1	**Polymer of 1,4-benzenedicarboxylic acid, adipic acid and 1,6-hexanediamine (polyamide 66T)**	PA	1,6-hexanediamine: 2.4	7.5 (expressed as terephthalic acid)	28			Japan
0025777-14-4	**Polybutylene succinate**	PBS, PBSU		5 (expressed as 1,4-butanediol)	30	**China and Japan:** The usage temperature shall not exceed 100ºC.	3	
0025895-46-9	**Polymers of ethylene,1-hexene and propylene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	
0025895-47-0	**Polymer of propylene, 1-butene and ethylene (where the propylene has the largest mass fraction)**	PP	5-ethylidene-2-norbornene: 0.05	30 (expressed as maleic acid)	3	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	6	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0026061-90-5	**Polymers of ethylene and methacrylic acid epoxy methyl ester (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** The usage temperature shall not exceed 100ºC. Do not use for alcoholic products. Ethylene content should be at least 50 % of the base polymer constituents.	2	
0026062-94-2	**Polymer of terephthalic acid and 1,4-butanediol**	PBT		7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** The usage temperature shall not exceed 121ºC.	1	
0026098-55-5	**Polymer of 1,12-dodecanedioic acid and 1,6-hexanediamine [*i.e.* poly(hexamethylene adipamide) or polyamide 612)]**	PA	1,6-hexanediamine: 2.4					Japan
0026125-40-6 / 0025212-74-2	**Poly(thio-1,4-phenylene) (*i.e.* polyphenylene sulphide)**	PPS	1,4-dichlorobenzene: 12			**China:** The usage temperature shall not exceed 121ºC.	1	
0026221-27-2	**Ethylene-vinylalcohol copolymer**	EVOH	Vinyl acetate: 12			**China:** It shall not be used in contact with foodstuffs with alcoholic content higher than 8 %.	3	
0026221-73-8	**Polymers of ethylene and 1- octene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	
0026222-42-4	**Polymer of (dimethylamino) ethyl methacrylate and methyl methacrylate**	PMMA	(dimethylamino) ethyl methacrylate: 0.02	6 (expressed as methacrylic acid)	23			Japan

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0026246-77-5	**Polymer of dimethyl terephthalate and 2,2,4 (and 2,4,4)-trimethyl-1,6-hexanediamine**	PA	Penicillamine (QMA): 5 mg/6 dm^2					Japan
0026337-35-9	**Polymers of ethylene, carbon monoxide and vinyl acetate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Do not use for milk and dairy products.	2	
0026375-31-5	**Polymers of ethylene, methacrylic acid, and vinyl acetate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.		Japan
0026376-80-7	**Polymers of ethylene, methacrylic acid and potassium hydroxide (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	3	
0026572-20-3	**Polymer of ethyl methacrylate and methyl acrylate**	PMMA		6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	22; 23			Japan
0026590-75-0	**Polymer of 1,3-propanediol and terephthalic acid**	PTT	1,3-propanediol: 0.05	7.5 (expressed as terephthalic acid)	28	**Japan:** The usage temperature shall not exceed 100ºC.	3	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0026655-00-5	**Polymer of 1,1,1,2,2,3,3-heptafluoro-3-[(trifluoroethenyl)oxy]-propane and tetrafluoroethylene**	PFA	Tetrafluoroethylene: 0.05				1	
0026809-51-8	**Polymer of methyl methacrylate, styrene and maleic anhydride**	PMMA		30 (expressed as maleic acid); 6 (expressed as methacrylic acid)	3; 23			Japan
0026936-24-3	**Polymer of methacrylic acid and methyl methacrylate and methyl acrylate**	PMMA		6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	22; 23			Japan
0027012-62-0	**Polymer of methyl acrylate, butadiene and acrylonitrile**	PAN	Acrylonitrile: nd Butadiene: nd or [or QMA: 1 mg/kg]	6 (expressed as acrylic acid)	22			Japan
0027027-87-8	**Diethylene glycol-isophthalic acid-modified polyethylene terephthalate copolymer; terephthalic acid and ethylene glycol and the following substances: isophthalic acid and diethylene glycol**	PET	Antimony: 0.04	30 (expressed as ethylene glycol); 5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	2; 27; 28		7	
0028064-24-6	**Polymer of ethylene, vinyl acetate and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Do not use for milk and dairy products.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0028208-80-2	**Polymer of ethylene, acrylic acid and zinc acetate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Do not use for milk and dairy products.	3	
0028262-63-7	**Polymer of methacrylic acid, butyl methacrylate and methyl methacrylate**	PMMA		6 (expressed as methacrylic acid)	23	**Japan:** The usage temperature shall not exceed 100ºC. Do not use for milk and dairy products. Methyl methacrylate should be 50 % or more of the base polymer constituents. Methacrylic acid should be 5 % or less based on the constituents of the base polymer.	3	
0028476-49-5	**Polymer of adipic acid, 1,4-butanediol and hexamethylene diisocyanate**	PUR	Hexamethylene diisocyanate, expressed as isocyanato (QMA): 1 mg/kg	5 (expressed as 1,4-butanediol)	30	**China:** The usage temperature shall not exceed 200ºC. **Japan:** The usage temperature shall not exceed 100ºC.	3	
0028516-43-0	**Polymer of ethylene, methacrylic acid and zinc acetate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	3	
0029160-13-2	**Polymer of propylene and 1-butene (where the propylene has the largest mass fraction)**	PP	5-ethylidene-2-norbornene: 0.05	30 (expressed as maleic acid)	3	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	6	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0029658-26-2	**Polymer of 4,4'-difluorobenzophenone and hydroquinone**	PEEK	4,4'-difluorobenzophenone: 0.05; Hydroquinone: 0.6				1	
0029891-05-2	**Polymer of adipic acid, 1,4-butanediol, hexamethylene diisocyanate, 1,6-hexanediol and 2,2-dimethyl-1,3-propanediol (< 2 %)**	PUR	2,2-dimethyl-1,3-propanediol: 0.05; 1,6-hexanediol: 0.05; Hexamethylene diisocyanate, expressed as isocyanato (QMA): 1 mg/kg	nd (expressed as isocyanato: LOD= 0.01 mg/kg); 5 (expressed as 1,4-butanediol)	17; 30	**China:** The usage temperature shall not exceed 200ºC. **Japan:** The usage temperature shall not exceed 100ºC.	3	
0030965-26-5	**Polymer of dimethyl terephthalate and 1,4-butanediol**	PBT		7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butanediol)	28; 30	**China:** The usage temperature shall not exceed 121ºC.	1	
0031069-12-2	**Polymer of ethylene, propylene and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0031784-04-0	**Polymer of pentafluoroethyl trifluoro vinyl ether and tetrafluoroethylene**	PFA	Tetrafluoroethylene: 0.05				1	
0032131-17-2	**Polymer of adipic acid and hexamethylenediamine (*i.e.* Polyamide 66)**	PA	1,6-hexamethylenediamine: 2.4				3	
0032335-23-2	**2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,1- dichloroethene and 2-methyl-2- propenenitrile**	PVDC	Vinylidene chloride: nd; Methacrylonitrile: nd	6 (expressed as methacrylic acid)	23	**China:** The usage temperature shall not exceed 120ºC.	4	
0036619-23-5	**Polymer of dimethyl terephthalate and 1,3-propanediol**	PTT	1,3-propanediol: 0.05	7.5 (expressed as terephthalic acid)	28	**China and Japan:** The usage temperature shall not exceed 100ºC.	3	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0037433-35-5	**Polymer of ethylene, methacrylic acid and isobutyl acrylate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0050327-22-5/ 0050327-77-0	**Polytetramethylene adipamide (*i.e.* polyamide 46)**	PA				**Japan:** The usage temperature shall not exceed 70ºC.	3	
0051025-80-0	**Polymer of terephthalic acid and 1, 6-hexanediamine (1:1) and caprolactam**	PA	1,6-hexanediamine: 2.4	15 (expressed as caprolactam); 7.5 (expressed as terephthalic acid)	4; 28		3	
0052255-42-2	**Polymer of ethylene, butyl acrylate, methacrylic acid and sodium hydroxide (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.		Japan
0055231-08-8	**Polybutylene terephthalate-adipate**	PBAT		7.5 (expressed as terephthalic acid); 5 (expressed as 1,4-butane diol)	28;30	**China:** The usage temperature shall not exceed 100ºC. It shall not contact frozen food and chilled food.		Japan
0058295-79-7	**Polymer of 2,6-dimethylphenol and 2,3,6-trimethylphenol**	PPE	2,6-dimethylphenol: 0.05				1	
0060785-11-7	**Polymers of ethylene, 1-butene and 1-hexene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	5	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0061128-46-9	**Polymer of 5,5'-[(1-methylethylidene) bis (4,1-phenyleneoxy)] bis (phthalic anhydride) and 1,3-phenylene diamine**	PEI	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6 1, 3-phenylenediamine: nd			**China:** It shall not be used for the production of baby food contact materials and articles		Japan
0061778-68-5	**Polymer of 1,12-dodecanedioic acid, terephthalic acid and 1,4-butanediol**	PBT	1,4-butanediol: 5	7.5 (expressed as terephthalic acid)	28			Japan
0061843-70-7	**Polymer of ethylene, butyl acrylate and carbon monoxide (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Do not use for milk and dairy products.	2	
0061843-71-8	**Polymers of ethylene, methacrylic acid, isobutyl acrylate and zinc acetate (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	3	
0062694-40-0	**1,3-Benzenedicarboxylic acid, polymer with azacyclotridecan- 2-one, 1,4-benzenedicarboxylic acid and 4,4'-methylenebis(2-methylcyclohexanamine)**	PA	Terephthalic acid: 7.5; Isophthalic acid: 5.0; 4,4'-methylenebis(2-methylcyclohexanamine): 0.05; Azacyclotridecan-2-one: 5			**China:** The manufactured materials and products using this resin shall not exceed 168°C and shall not be used for irradiation.		Japan

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0063625-36-5	**Polymers of ethylene and 1-butene and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0064652-60-4	**Polymers of ethylene, butyl acrylate and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg. **Japan:** Butyl acrylate must be less than 10 % of the base polymer constituents.	2	
0064811-37-6	**Polymer (polyester elastomer) of dimethyl terephthalate, 1,4-butanediol, methyloxirane and ethylene oxide**	TPC- ET	Polymer of dimethyl terephthalate, 1,4-butanediol, methyloxirane and ethylene oxide (QMA): 0.9 g/ dm^2; Ethylene oxide (QMA):1 mg/kg; Ethylene oxide: nd; Methyloxirane (QMA):1 mg/kg	5 (expressed as 1,4-butanediol)	30		3	
0067874-31-1	**Polymer of butyl methacrylate, methyl methacrylate and hydroxypropyl methacrylate**	PMMA		6 (expressed as methacrylic acid)	23			Japan
0068258-85-5	**Copolymer of 3,3,4,4,5,5,6,6,6,6-nonafluoro 1-hexene, ethylene and tetrafluoroethylene**	ETFE	Tetrafluoroethylene: 0.05				1	
0070679-92-4	**Polymer of 6-(acetyloxy)-2-naphthoic acid and 4-(acetyloxy) benzoic acid**	LCP	6-hydroxy-2-naphthoic acid: 0.05; 4,4'-dihydroxybiphenyl: 6; N-(4-hydroxyphenyl) acetamide: 0.05			**China:** It shall not be used to contact foodstuffs with an alcoholic content higher than 8 % and solid fatty foodstuffs.		Japan

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0071519-80-7	**Polymer of isophthaloyl chloride, terephthaloyl chloride, carbonyl dichloride and 4,4'-isopropylidene diphenol (*i.e.* bisphenol A)**	PC	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6 (expressed as carbonyl dichloride) (QMA): 1 mg/kg Carbonyl dichloride: nd	5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	27; 28	**China:** It shall not be used for the production of baby food contact materials and articles. **Japan:** The ester of bisphenol A with isophthalic acid chloride or terephthalic acid chloride should be in the range of 45 to 85 mol % with respect to the base polymer constituents. The content of terephthaloyl chloride should be 55 mol % or more with respect to the acid component of the ester.	1	
0077699-82-2	**Polymer of (4,4'-isopropylidenediphenoxy) bis (phthalic anhydride) (bisphenol A dianhydride) and 4,4'-sulphonyl diphenylamine**	PEI	(expressed as bisphenol A dianhydride): 0.05 (expressed as 4,4'-sulphonyl diphenylamine): 5					Japan
0079331-75-2	**1,3-Benzenedicarboxylic acid, polymer with azacyclotridecan- 2-one and 4,4-methylenebis[2-methylcyclohexanamine] (*i.e.* PA 12T or nylon 12T)**	PA	1,3-benzenedicarboxylic acid: 5; Azacyclotridecan- 2- one: 5; 3,3-dimethyl-4,4-diamino dicyclohexylmethane: 0.05			**China:** The manufactured materials and products shall only be used in contact with aqueous, acidic, fatty and alcoholic foodstuffs with an alcoholic content below 8 %. The mass percentage range of monomers shall be: Azetidin tridecyl-2-one: 34.4 ± 1.5 %; Isophthalic acid: 26.8 ± 0.4 %; 3,3'-dimethyl-4,4-diamino; and dicyclohexylmethane 38.8 ± 0.5 %.		Japan
0081229-87-0	**1-Octadecene polymer with 1-hexadecene and 4-methyl-1-pentene (*i.e.* 4-Methyl-1-pentene α-olefin copolymer)**	PMP	4-methyl-1-pentene: 0.05			**China:** The amount of 4-methyl-1-pentene material should not be less than 97 % by mole. **Japan:** One or more kinds of 1-alkene can be used. 1-alkene with C = 2 to 5 is 10 mol % or less based on the constituents of the base polymer. The 1-alkene with C = 6 to 10 should be 8 mol % or less based on the constituents of the base polymer. 1-alkene with C = 12 to 18 is 3 mol % or less based on the constituent components of the base polymer.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0085023-55-8	**Polymers of ethylene, maleic anhydride, 1 hexene and propylene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0085244-45-7	**Polymers of ethylene, maleic anhydride and 1-octene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0086286-09-1	**Polymer of ethylene, maleic anhydride and 1-hexene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0088450-35-5	**Polymers of ethylene, methyl acrylate and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0088526-47-0	**Hydrogenated aromatic petroleum hydrocarbon resins**	Hydrogenated petroleum hydrocarbon resin				**China:** Composed of dienes and olefins of the aliphatic, alicyclic and / or monophenylenic aromatic alkenes in the cracked petroleum fraction with boiling point below 220ºC and the monomers in the fractions by catalysis, or thermal polymerization and distillation, hydrogenation and other processing. Nature: When higher than 120 ºC, viscosity > 3 Pa • s; softening temperature> 95ºC; bromine value <40; 50 % toluene color of the substance should be <11 (Gardner color code); total aromatic monomer residue ≤ 50 mg/kg.		Japan
0093228-27-4	**Polymer of ethylene, methacrylic acid, isobutyl acrylate, potassium hydroxide (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	3	
0103598-77-2	**Poly (4,4'-isopropylidene diphenyl carbonate) end capped with p-tert-butylphenol**	PC	4,4'-isopropylidene diphenol: 0.6; p-tert-butylphenol: 0.05; Carbonyl dichloride: nd [or QMA: 1 mg/kg]			**China:** It shall not be used for the production of baby food contact materials and articles	1	
0106177-14-4	**Polymer of ethylene, maleic anhydride and propylene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0106343-08-2	**Polymers of ethylene and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0107001-49-0	**Polymer of propylene and maleic anhydride (where the propylene has the largest mass fraction)**	PP	5-ethylidene-2-norbornene: 0.05	30 (expressed as maleic acid)	3	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0107137-84-8	**Polymers of ethylene maleic anhydride and 1-butene (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0108388-93-8	**Polymer of ethylene and 1-hexene and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0114096-64-9	**Polymer of isophthaloyl chloride, terephthaloyl chloride, carbonyl dichloride, 4,4'-isopropylidene diphenol (*i.e.* bisphenol A), 4-(1-methyl-1-phenylethyl) phenol (p-cumylphenol) and bis [4-(1-methyl) -1-phenylethyl**	PC	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; [4-(1-methyl-1-phenylethyl) phenol (p-cumylphenol):0.05; Carbonyl dichloride: nd [or QMA: 1 mg/kg)]	5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	27; 28	**China:** It shall not be used for the production of baby food contact materials and articles. **Japan:** The ester of bisphenol A with isophthalic acid chloride or terephthalic acid chloride should be in the range of 45 to 85 mol % with respect to the base polymer constituents. The content of terephthaloyl chloride should be 55 mol % or more with respect to the acid component of the ester.	1	
0114571-44-7	**Polymer of ethylene and 1-octene and maleic anhydride (where the ethylene has the largest mass fraction)**	PE	Hexene: 3; Octylene: 15; Vinyl acetate: 12; Zinc acetate (expressed as zinc): 25; 5-ethylidene-2-norbornene: 0.05; Methacrylic acid epoxy methyl ester (QMA): 0.02 mg/6 dm^2	30 (expressed as maleic acid); 6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	3; 22; 23	**China:** 0.05 mg/6 dm^2 (QMA) can be used as the limit value when there is no test method for migration of 5-ethylidene-2-norbornene available. The ratio between the area of plastic materials or articles containing 5-ethylidene-2-norbornene in contact with food and the food mass shall not be greater than 2 dm^2/kg.	2	
0125495-90-1	**Copolymer of (3R)-3-hydroxybutyric acid and 4-hydroxybutyric acid**	Poly (3HB-co-4HB); P(3,4HB)		5 (expressed as 1,4-butanediol)	30	**China:** Plastic materials or articles shall not become in contact with alcoholic foodstuffs. The usage temperature shall not exceed 100ºC.		Japan
0127104-68-1	**Polymer of butyl methacrylate, ethylene, methyl methacrylate and propylene**	PMMA		6 (expressed as methacrylic acid)	23			Japan
0127573-73-3	**Polymer of butyl acrylate and butyl methacrylate, 2- (dimethylamino) ethyl methacrylate and methyl methacrylate**	PMMA	(expressed as 2-(dimethylamino) ethyl methacrylate): 0.02	6 (expressed as acrylic acid); 6 (expressed as methacrylic acid)	22; 23			Japan
132778-07-5	**Styrene block polymers with 2-methyl-1,3- butadiene and 1,3-butadiene, hydrogenated**	PS	2-methyl-1,3- butadiene: nd (QMA: 1 mg/kg); 1,3-butadiene: nd (QMA: 1 mg/kg); Styrene (QMA): 0.5 %.					

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0147310-94-9	**Polymer of terephthalic acid, [1,1'-biphenyl]-4,4'-diol, 4 hydroxybenzoic acid, 6-hydroxy 2-naphthoic acid and N- (4- hydroxyphenyl) acetamide**	LCP	6-hydroxy-2-naphthoic acid: 0.05; 4,4'-dihydroxybiphenyl: 6; N-(4-hydroxyphenyl) acetamide: 0.05	7.5 (expressed as terephthalic acid)	28	**China:** It shall not be used in contact with alcoholic foodstuffs with an alcoholic content above 8 % and with solid fatty foodstuffs. **Japan:** The usage temperature shall not exceed 100°C. The sum of 4-hydroxybenzoic acid and 6-hydroxy-2-naphthoic acid must be 55 mol % or more based on the constituents of the base polymer. The sum of terephthalic acid, 4-hydroxyacetanilide and 4,4'-biphenol should be 25 mol % or less based on the constituents of the base polymer.	1	
0163800-67-7	**Poly [imino (2-methyl-1,4-cyclohexanediyl) methylene (3-methyl-1,4-cyclohexanediyl) imino (1,12-dioxo-1,12-dodecanediyl)] (*i.e.* Polyamide MACM 12)**	PA	3,3'-dimethyl-4,4'-diamino dicyclohexyl methane: 0.05			**China:** Only to be used in the manufacture of food contact materials and products intended for repeated use.		Japan
0202483-49-6	**Copolymer of polydimethylsiloxane end capped with 3-(4-hydroxy-3- methoxyphenyl) propyl, silicone resin, 4,4'-isopropylidene diphenol (*i.e.* bisphenol A), carbonyl dichloride and 4- (1- methyl-1-phenylethyl) phenol**	PC	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6 Carbonyl dichloride: nd [or QMA: 1 mg/kg]			**China:** It shall not be used for the production of baby food contact materials and articles. **Japan:** The usage temperature shall not exceed 100°C. Siloxane content should be 22 % or less of the base polymer constituents. In $C_{24}H_{38}Si_2O_5$ $(SiOC_2H_6)_n$, $26 \leqq n < 50$.	1	
2068097-08-3	**Fatty acid, C18- unsaturated, dimers, polymers with caprolactam and hexamethylenediamine**	PA	Caprolactam: 15; hexamethylenediamine: 2.4; Fatty acid, C18- unsaturated: 0.05			**China:** It shall not be used in contact with dairy products or to produce baby food contact materials and articles. The usage conditions shall be RT filling and long-term storage at RT (Including hot fill up to 70°C during 2 h and sterilization up to 100°C during 15 min).		Japan
0219566-57-1	**Polymer of trans-1,4-cyclohexanedicarboxylic acid dimethyl ester with 1,4-cyclohexanedimethanol**	PCCD						Japan

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0235420-85-6	**Polymer of isophthaloyl chloride, and terephthaloyl chloride, resorcinol, carbonyl dichloride, 4,4'-isopropylidene diphenol (*i.e.* bisphenol A) and bis [4- (1-methyl-1 -phenylethyl) phenyl] ester**	PC	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; 4- (1-methyl-1-phenylethyl) phenol (p-cumylphenol): 0.05; hydroxyphenol: 2.4; Carbonyl dichloride: nd [or QMA: 1 mg/kg]	5 (expressed as isophthalic acid); 7.5 (expressed as terephthalic acid)	27; 28	**China:** It shall not be used for the production of baby food contact materials and articles. **Japan:** The usage temperature shall not exceed 100ºC.	1	
0261716-94-3	**Polymer of dimethyl terephthalate, 1,4-cyclohexanedimethanol, and 2,4,4,4-tetramethyl-1,3-cyclobutanediol**	Modified PCT	2,2,4,4-tetramethyl-1,3-cyclobutanediol: 5			**China:** The usage temperature shall not exceed 100ºC. **Japan:** The usage temperature shall not exceed 100ºC. Do not use for milk and dairy products. The content of 2,2,4,4-tetramethyl-1,3-cyclobutanediol should be 40 mol % or less based on the alcohol component. Trimetic anhydride can be polymerized at 0.5 % or less with respect to the base polymer constituents.	3	
0394249-05-9	**Polymer of butyl methacrylate, hydroxyethyl methacrylate, methyl methacrylate and methacrylamide**	PMMA	Methacrylamide: nd	6 (expressed as methacrylic acid)	23			Japan
0411234-34-9	**Polymer of carbonyl chloride, 4,4'-cyclohexylidene bis (2-methylphenol), 4,4'-isopropylidenediphenol (*i.e.* bisphenol A) and bis [4- (1-methyl-1-phenylethyl) phenyl] ester**	PC	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; Carbonyl chloride (QMA): 1 mg/kg			**China:** It shall not be used for the production of baby food contact materials and articles.		Japan
0536741-00-1	**Polymer of 3-chlorophthalic anhydride and 1,3-phenylenediamine, 4-chlorophthalic anhydride, phthalic anhydride and 4,4'-isopropylidene diphenol (*i.e.* bisphenol A)**	PEI	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; 1,3-phenylene diamine: nd; 4-chlorophthalic anhydride, expressed as 4-chlorophthalic anhydride: 0.05; 3-chlorophthalic anhydride, expressed as 3-chlorophthalic anhydride: 0.05			**China:** It shall not be used for the production of baby food contact materials and articles.	1	

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Polymers positive list								
CAS No.	**Chemical name**	**Generic Class Name**	**SML (and/or QMA) [mg/kg]**	**SML(T) [mg/kg]**	**SML(T) Group No.**	**Other Requirements**	**Resin category[468]**	**Markets with usage ban**
0911701-92-3	**Polymer of 3-chlorophthalic anhydride and m-phenylenediamine, 4-chlorophthalic anhydride and 4,4 '- (1-methylethyl acetal) bisphenol, with 4-(1-methyl-1-phenylethyl) phenol (p-cumylphenol) as end-capping agent**	PEI	4,4'-isopropylidene diphenol (*i.e.* bisphenol A): 0.6; 1,3-phenylene diamine: nd; 4-chlorophthalic anhydride (expressed as 4-chlorophthalic anhydride): 0.05; 3-chlorophthalic anhydride (expressed as 3-chlorophthalic anhydride): 0.05; 4-(1-methyl-1-phenylethyl) phenol (p-cumylphenol): 0.05			**China:** It shall not be used for the production of baby food contact materials and articles.	1	
1038843-64-9	**Terephthalic acid, polymer with 1,4:3,6-dianhydro-D-glucitol, 1,4-cyclohexanedimethanol and 1,2-ethanediol (*i.e.* PEICT)**	PET	1,2-ethanediol: 30; 1,4-Phthalic acid: 7.5; Isosorbide: 5			**China:** The usage temperature shall not exceed 100°C. **Japan:** The maximum temperature shall be II when isosorbide is 40 mol % or less based on the constituents of the base polymer. If isosorbide is in the range of 41-60 mol % with respect to the base polymer constituents, it should not be used above 121°C.	7	
1105025-82-8	**1,4-Benzenedicarboxylic acid, polymer with 5-amino-1,3,3'-trimethyl-cyclohexanemethanamine and hexahydro-2H-azepin-2-one**	PA	1,4- benzenedicarboxylic acid: 7.5; 5-amino-1,3,3'-trimethylcyclohexyl methylamine: 6; Caprolactam: 15			**Japan:** The sum of terephthalic acid and isophoronediamine must be less than 1 % with respect to the base polymer constituents.	3	
1224447-95-3	**Polymer of polybutylene terephthalate-polytetrahydrofurane ether block copolymer and maleic anhydride**	PBT	Tetrahydrofuran: 0.6	30 (expressed as maleic acid); 5 (expressed as 1,4-butanediol)	3; 30	**China:** The usage temperature shall not exceed 121°C.	3	
66070-58-4	**Styrene polymer with 1,3-butadiene, hydrogenated**	PS	1,3-butadiene: nd [or QMA: 1 mg/kg] Styrene (QMA): 0.5 %			**Japan:** only can be used in contact with fatty foods when it is mixed with other base polymers	2	

b) Monomers positive list

Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
-	5-Sulphoisophthalic acid, salts	5				
-	Albumin, coagulated by formaldehyde					
-	Alcohols, aliphatic, monohydric, saturated, linear, primary (C4-C22)					
-	Methallylsulphonic acid, salts	5				
-	Mixture of (40 % w/w) 2,2,4- trimethylhexane-1,6-diisocyanate and (60 % w/w) 2,4,4-trimethyl-hexane-1,6-diisocyanate	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
-	Phthalic acid		28	7.5 (expressed as terephthalic acid)		
-	Trialkyl acetic acid (C7-C17), vinyl esters	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
-	Trialkyl(C5-C15)-acetic acid, 2,3- epoxypropyl ester	nd [and QMA: 1 mg/kg in final product (expressed as epoxy group)]			Molecular weight is 43 Da.	
0000050-00-0	Formaldehyde		15	15 (expressed as formaldehyde)		
0000050-21-5	Lactic acid					

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0000050-70-4	D-sorbitol					
0000050-99-7	Glucose					
0000056-81-5	Glycerol (*i.e.* glycerine)					
0000057-10-3	Palmitic acid					
0000057-11-4	Stearic acid (*i.e.* octadecanoic acid)					
0000057-13-6	Urea					
0000057-50-1	Sucrose					
0000057-55-6	1,2-Propanediol					
0000064-17-5	Ethanol					
0000064-19-7	Acetic acid					
0000065-85-0	Benzoic acid					
0000067-56-1	Methanol					
0000067-63-0	2-Propanol (*i.e.* isopropanol)					
0000069-72-7	Salicylic acid					
0000071-23-8	1-Propanol (*i.e.* N-propyl alcohol)					
0000071-36-3 / 0000078-83-1 / 0000078-92-2 / 0000075-65-0	1-Butanol					
0000071-41-0	1-Pentanol					
0000074-85-1	Ethylene					
0000074-86-2	Acetylene					

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000075-01-4	**Vinyl chloride**	nd [and QMA: 1 mg/kg in final product]				
0000075-07-0	**Acetaldehyde**		1	6 (expressed as acetaldehyde)		
0000075-21-8	**Epoxy ethane (*i.e.* ethylene oxide)**	nd [or QMA: 1 mg/kg in final product]				Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000075-35-4	**1,1-Dichloroethylene (*i.e.* vinylidene chloride)**	nd [or QMA: 5 mg/kg in final product]				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0000075-38-7	**Vinylidene fluoride**	5				
0000075-44-5	**Carbonyl chloride**	nd [or QMA: 1 mg/kg in final product]				Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000075-56-9	**1, 2-Epoxy propane (*i.e.* propylene oxide)**	nd [and QMA: 1 mg/kg in final product]				
0000077-92-9	**Citric acid**					
0000077-99-6	**1,1,1-Trimethylolpropane (*i.e.* 2,2-dihydroxymethyl butanol; or tri(hydroxymethyl) propane; or TMP)**	6				
0000078-08-0	**Vinyltriethoxysilane**	0.05			Only to be used as a surface treatment agent.	
0000078-79-5	**2-Methyl-1,3-butadiene**	nd [and QMA: 1 mg/kg in final product]				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000079-06-1	Acrylamide	nd				
0000079-09-4	Propionic acid					
0000079-10-7	Propenoic acid (*i.e.* acrylic acid)		22	6 (expressed as acrylic acid)		
0000079-14-1	Glycolic acid				Only to be used for manufacture of polyglycolic acid (PGA) for (i) indirect food contact behind polyesters such as polyethylene terephthalate (PET) or polylactic acid (PLA); and (ii) direct food contact of a blend of PGA up to 3 % w/w in PET or PLA.	
0000079-38-9	Chlorotrifluoroethylene	nd				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0000079-39-0	Methacrylamide	nd				
0000079-41-4	Methacrylic acid (*i.e.* 2-methylpropenoic acid)		23	6 (expressed as methacrylic acid)		
0000080-05-7	2,2-Bis-(4-hydroxyphenyl)-propane (*i.e.* bisphenol A)	0.05				Not to be used for the manufacture of polycarbonate infant feeding bottles. Not to be used for the manufacture of polycarbonate drinking cups or bottles which, due to their spill proof characteristics, are intended for infants and young children.
0000080-07-9	4,4′-Dichlorodiphenyl sulphone	0.05				
0000080-08-0	4,4′-Diaminodiphenyl sulphone	5				
0000080-09-1	4,4′-Dihydroxydiphenyl sulphone (*i.e.* bisphenol S)	0.05				
0000080-56-8	α-pinene					

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000080-62-6	**Methyl methyacrylate**		23	6 (expressed as methacrylic acid)		
0000085-44-9	**Phthalic anhydride**					
0000088-99-3	**o-Phthalic acid**					
0000089-32-7	**Benzenetetracarboxylic anhydride (*i.e.* 1H,3H-benzo[1,2-c:4,5-c'] difuran-1,3,5,7-tetrone; or pyromellitic anhydride)**	0.05				SML expressed as pyromellitic acid.
0000091-08-7	**1,3-Diisocyanato-2-methylbenzene (*i.e.* 2,6-toluene diisocyanate)**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000091-76-9	**2, 4-Diamino-6-phenyl-1, 3, 5-triazine**	5				
0000091-97-4	**3,3′-Dimethyl-4,4′-diisocyanato- biphenyl**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000092-88-6	**4,4′-Dihydroxybiphenyl (*i.e.* (1,1'-Biphenyl)-4,4'-diol)**	6				
0000095-48-7	**o-Cresol**					
0000096-05-9	**2-Methyl-2-propenoic acid-2-propenyl ester (*i.e.* methacrylic acid, allyl ester)**	0.05				
0000096-33-3	**Methyl acrylate**		22	6 (expressed as acrylic acid)		

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000096-49-1	**Ethylene carbonate**	30			SML expressed as ethyleneglycol. Residual content of 5 mg ethylene carbonate per kg of hydrogel with max 10 g of hydrogel in contact with 1 kg of food.	
0000097-53-0	**Eugenol**	nd	33	nd (expressed as eugenol)		
0000097-63-2	**Ethyl methacrylate**		23	6 (expressed as methacrylic acid)		
0000097-65-4	**Itaconic acid (*i.e.* methylenebutanedioic acid)**					
0000097-86-9	**Isobutyl methacrylate**		23	6 (expressed as methacrylic acid)		
0000097-88-1	**Butyl methacrylate**		23	6 (expressed as methacrylic acid)		
0000097-90-5	**1,2-Ethanediol dimethacrylate**	0.05				
0000098-54-4	**4-Tert-butylphenol**	0.05				
0000098-83-9	**2-Phenyl-1-propene (*i.e.* α-methylstyrene)**	0.05				
0000099-63-8	**1,3-Benzenedicarbonyl dichloride (*i.e.* isophthalic acid dichloride)**		27	0.5 (expressed as isophthalic acid)		
0000099-96-7	***p*-Hydroxybenzoic acid**					
0000100-20-9	**Terephthalic acid dichloride**		28	7.5 (expressed as terephthalic acid)		
0000100-21-0	**1,4-Benzenedicarboxylic acid,terephthalic acid**		28	7.5 (expressed as terephthalic acid)		
0000100-42-5	**Styrene**					

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000100-51-6	**Benzyl alcohol**					
0000100-97-0	**Hexamethylenetetramine**		15	15 (expressed as formaldehyde)		
0000101-43-9	**Methacrylic acid, cyclohexyl ester**	0.05				
0000101-68-8	**Diphenylmethan-4,4'-diisocyanate**	QMA: 1 mg/kg in final product (expressed as isocyanate)	17	nd (expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000101-90-6	**Resorcinol diglycidyl ether**	nd			Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. For indirect food contact only, behind a PET layer.	Verification of compliance by residual content per food contact surface area (QMA); QMA = 0.005 mg/6 dm^2.
0000102-09-0	**Diphenyl carbonate**	0.05				
0000102-39-6	**(1,3-Phenylenedioxy) diacetic acid**	0.05				
0000102-40-9	**1,3-Bis(2-hydroxyethoxy) benzene**	0.05				
0000102-60-3	**N,N,N′,N′-tetrakis(2-hydroxypropyl) ethylenediamine**					
0000102-70-5	**Triallylamine**				40 mg/kg hydrogel at a ratio of 1 kg food to a maximum of 1.5 grams of hydrogel. Only to be used in hydrogels intended for non-direct food contact use.	
0000103-11-7	**2-Ethylhexyl acrylate**	0.06				
0000103-90-2	**N-(4-hydroxyphenyl) acetamide**	0.05				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000104-76-7	2-Ethyl hexanol	30				
0000105-08-8	1,4-Bis-(hydroxymethyl)-cyclohexane					
0000105-38-4	Propionic acid, vinyl ester		1	6 (expressed as acetaldehyde)		
0000105-60-2	Caprolactam		4	15 (expressed as caprolactam)		
0000106-31-0	Butyric anhydride					
0000106-44-5	*p*-Cresol					
0000106-46-7	1,4-Dichlorobenzene	12				
0000106-63-8	2-Propenoic acid, 2-methylpropyl ester; acrylic acid, isobutyl ester		22	6 (expressed as acrylic acid)		
0000106-89-8	Epichlorohydrin	nd [or QMA: 1 mg/kg in final product]				Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000106-91-2	Glycidyl methacrylate (*i.e.* methacrylic acid, 2,3-epoxypropyl ester)	0.02				Where reaction may occur between glycidyl methacrylate and the food or food simulant contacted by the former, 0.02mg/6 dm^2 (QMA) is regarded as its limit value.
0000106-98-9	1-Butene					
0000106-99-0	1,3-Butadiene	nd [and QMA: 1 mg/kg in final product]				
0000107-01-7	2-Butene					
0000107-13-1	Acrylonitrile	nd				

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0000107-15-3	1,2-Ethanediamine	12				
0000107-21-1	1,2-Ethanediol		2	30 (expressed as ethyleneglycol)		
0000107-88-0	1,3-Butanediol					
0000107-92-6	Butyric acid					
0000108-01-0	2-Dimethylaminoethanol	18				
0000108-05-4	Vinyl acetate	12				
0000108-24-7	Acetic anhydride					
0000108-30-5	Succinic anhydride					
0000108-31-6	Maleic anhydride		3	30 (expressed as maleic acid)		
0000108-39-4	*m*-Cresol					
0000108-45-2	1,3-Phenylenediamine	nd				A detection limit of 0.002 mg/kg food or food simulant applies.
0000108-46-3	1,3-Dihydroxybenzene	2.4				
0000108-55-4	Glutaric anhydride					
0000108-78-1	1,3,5-Triazine-2,4,6-triamine (*i.e.* melamine)	2.5				
0000108-95-2	Phenol	3				

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0000109-53-5	Isobutyl vinyl ether	0.05				Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000109-67-1	1-Pentene	5				
0000109-99-9	Tetrahydrofuran	0.6				
0000110-15-6	Succinic acid					
0000110-16-7	Maleic acid		3	30 (expressed as maleic acid)		
0000110-17-8	Fumaric acid					
0000110-60-1	1,4-Diaminobutane					
0000110-63-4	1,4-Butanediol		30	5 (expressed as 1,4-butanediol)		
0000110-88-3	Trioxane	5				
0000110-94-1	Glutaric acid					
0000110-98-5 / 0025265-71-8	Dipropyleneglycol (*i.e.* Oxydipropanol)					
0000111-20-6	Sebacic acid					
0000111-40-0	Diethylene triamine	5				
0000111-46-6	Diethylene glycol		2	30 (expressed as ethylene glycol)		
0000111-66-0	1-Octene	15				
0000111-87-5	1-Octanol					
0000112-27-6	Triethylene glycol		2	30		-
0000112-30-1	1-Decanol					
0000112-41-4	1-Dodecene	0.05				

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0000112-60-7	Tetraethyleneglycol					
0000112-80-1	Oleic acid (*i.e.* cis-9-octadecenoic acid; or (Z)-9-octadecenoic acid)					
0000112-96-9	Octadecyl isocyanate	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000115-07-1	Propylene					
0000115-11-7	Isobutene					
0000115-27-5	4,5,6,7,8,8-Hexachloro-3a,4,7,7a-tetrahydro-4,7-methano-2-benzofuran-1,3-dione (*i.e.* hexachloroendomethylene tetrahydrophthalic anhydride)	nd				
0000115-28-6	Hexachloroendomethylene tetrahydrophthalic acid	nd				
0000115-77-5	Pentaerythritol					
0000116-14-3	Tetrafluoroethylene	0.05				
0000116-15-4	Hexafluoropropylene	nd				
0000117-21-5	3-Chlorophthalic anhydride	0.05				SML expressed as 3-chlorophthalic acid.
0000118-45-6	4-Chlorophthalic anhydride	0.05				SML expressed as 4-chlorophthalic acid.
0000120-61-6	Terephthalic acid, dimethyl ester					

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0000120-80-9	1,2-Dihydroxybenzene	6				
0000121-91-5	Isophthalic acid		27	5 (expressed as isophthalic acid)		
0000122-52-1	Phosphorous acid, triethyl ester	nd [or QMA: 1 mg/kg in final product]				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0000123-31-9	1,4-Dihydroxybenzene (*i.e.* Hydroquinone)	0.6				
0000123-38-6	Propionaldehyde					
0000123-62-6	Propionic anhydride					
0000123-72-8	Butyraldehyde					
0000123-99-9	Azelaic acid					
0000124-04-9	Adipic acid (*i.e.* hexanedioic acid)					
0000124-07-2	Caprylic acid (*i.e.* octanoic acid)					
0000124-09-4	Hexamethylenediamine	2.4				
0000126-30-7	2,2-Dimethyl-1,3-propanediol	0.05				
0000126-58-9	Dipentaerythritol					
0000126-98-7	Methacrylonitrile (*i.e.* 2-methyl-2-propenenitrile)	nd				
0000127-63-9	Diphenyl sulphone	3				
0000127-91-3	β-Pinene					
0000131-17-9	Diallyl phthalate	nd				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000140-88-5	**Ethyl acrylate**		22	6 (expressed as acrylic acid)		
0000141-32-2	**Butyl acrylate**		22	6 (expressed as acrylic acid)		
0000141-43-5	**Ethanolamine (*i.e.* 2-aminoethanol)**	0.05			Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. For indirect food contact only, behind a PET layer.	
0000143-07-7	**Lauric acid**					
0000143-08-8	**1-Nonanol**					
0000144-62-7	**Oxalic acid (*i.e.* ethanedionic acid)**					
0000151-56-4	**Ethyleneimine**	nd				
0000334-48-5	**n-Decanoic acid**					
0000345-92-6	**4,4′-Difluorobenzophenone**	0.05				
0000498-66-8	**Bicyclo-[2.2.1]-hept-2-ene**	0.05				
0000502-44-3	**Caprolactone**		29	0.05 (expressed as the sum of 6-hydroxyhexanoic acid and caprolactone)		

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000504-63-2	**1,3-Propanediol**	0.05				
0000505-65-7	**1,4-butanediol formal**	0.05	15; 30	15 (Group No. 15-expressed as formaldehyde); 5 (Group No. 30-expressed as 1,4-butanediol)		In case of reaction with foods or simulants verification of compliance shall include verification that the migration limits of the hydrolysis products, formaldehyde and 1,4-butanediol, are not exceeded.
0000514-10-3	**Abietic acid**					
0000528-44-9	**1,2,4-Benzenetricarboxylic acid (*i.e.* trimellitic acid)**		21	5 (expressed as trimellitic acid)		
0000544-63-8	**Myristic acid**					
0000552-30-7	**1,3-Dioxo-1,3-dihydro-2-benzofuran-5-carboxylic acid (*i.e.* trimellitic anhydride)**		21	5 (expressed as trimellitic acid)		
0000563-45-1	**3-Methyl-1-butene**	nd			Only to be used in polypropylene.	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000576-26-1	**2,6-Dimethylphenol**	0.05				
0000584-84-9	**2, 4-Diisocyanato-1-methyl-benzene (*i.e.* 2,4-toluene diisocyanate)**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000585-07-9	**Tert-butyl 2-methyl-2-propenoate**		23	6 (expressed as methacrylic acid)		
0000592-41-6	**1-Hexene**	3				
0000598-32-3	**3-Buten-2-ol**	nd			Only to be used as a co-monomer for the preparation of polymeric additive.	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0000599-64-4	**4-(1-Methyl-1-phenylethyl)-phenol (*i.e.* 4-cumylphenol)**	0.05				
0000611-99-4	**4,4′-Dihydroxybenzophenone**		8	6 (expressed as the sum of the substances)		

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0000616-38-6	Dimethyl carbonate				Only to be used: a) with 1,6-hexanediol in the manufacture of polycarbonate pre- polymers that are used at up to 30 % to manufacture thermoplastic polyurethanes with 4,4′-methylenediphenyldiisocyanate and diols, such as polypropylene glycol and 1,4-butanediol. The resulting material shall only be applied in repeated use articles intended to come into short–term contact (≤ 30 min at room temperature) with food for which simulants A and/or B are assigned in Table 2 of Annex III of Commission Regulation (EC) No 10/2011; or b) for the production of other polycarbonates and/or under other conditions provided that the migration of dimethyl carbonate does not exceed 0.05 mg/kg food and that the migration of all polycarbonate oligomers with a molecular weight below 1000 Da together does not exceed 0.05 mg/kg food.	When a final material or article containing this substance and produced under conditions other than those described in point (a) column 10 of Table 1 is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified in point (b) column 10 of Table 1 of Commission Regulation (EC) No 10/2011 shall form part of the supporting documentation referred to in Article 16 of Commission Regulation (EC) No 10/2011. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.
0000629-11-8	1,6-Hexanediol	0.06				
0000630-08-0	Carbon monoxide					
0000646-06-0	1,3-Dioxolane	5				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000646-25-3	**1,10-Decanediamine**	0.05			Only to be used as a co-monomer for manufacturing polyamide articles for repeated use in contact with aqueous, acidic and dairy foodstuffs at room temperature or for short term contact up to 150°C.	
0000652-67-5	**1,4:3,6-Dianhydrosorbitol**	5			Only to be used as: (a) a co-monomer in poly(ethylene-*co*-isosorbide terephthalate); (b) a co-monomer at levels of up to 40 mole % of the diol component in combination with ethylene glycol and/or 1,4-bis(hydroxymethyl) cyclohexane, for the production of polyesters. Polyesters made using dianhydrosorbitol together with 1,4-bis(hydroxymethyl)cyclohexane shall not be used in contact with foods containing more than 15 % alcohol.	
0000689-12-3	**Acrylic acid, isopropyl ester**		22	6 (expressed as acrylic acid)		
0000691-37-2	**4-Methyl-1-pentene**	0.05				
0000693-23-2	**n-Dodecanedioic acid**					
0000693-57-2	**12-Aminododecanoic acid**	0.05				
0000760-93-0	**2-Methyl-2-propenoic acid anhydride (*i.e.* methacrylic anhydride)**		23	6 (expressed as methacrylic acid)		
0000818-61-1	**2-Hydroxyethyl acrylate (*i.e.* acrylic acid, monoester with ethyleneglycol)**		22	6 (expressed as acrylic acid)		

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000822-06-0	**1,6-Diisocyanato-Hexane (*i.e.* hexamethylene diisocyanate)**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0000840-65-3	**Dimethyl 2,6-naphthalene dicarboxylate**	0.05				
0000868-77-9	**2-Hydroxyethyl methacrylate**		23	6 (expressed as methacrylic acid)		
0000872-05-9	**1-Decene**	0.05				
0000919-30-2	**3-Aminopropyltriethoxysilane**	0.05				Residual extractable content of 3-aminopropyltriethoxysilane to be less than 3 mg/kg filler when used for the reactive surface treatment of inorganic fillers. SML = 0.05 mg/kg when used for the surface treatment of materials and articles.
0000923-02-4	**N-Methylolmethacrylamide**	0.05				
0000924-42-5	**N-Methylolacrylamide**	nd				
0000925-60-0	**Acrylic acid, propyl ester**		22	6 (expressed as acrylic acid)		
0000931-88-4	**Cyclooctene**	0.05			Only to be used in polymers contacting foods for which simulant A is laid down.	
0000947-04-6	**2-Azacyclotridecanone (*i.e.* laurolactam)**	5 (expressed as 2-azacycl otridecanone)				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000976-56-7	**Diethyl-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-methyl]-phosphonate**				Only to be used up to 0.2 % w/w based on the final polymer weight in the polymerisation process to manufacture poly(ethylene terephthalate) (PET).	
0000999-61-1	**Acrylic acid, 2-hydroxypropyl ester**	0.05			SML expressed as the sum of acrylic acid, 2-hydroxypropyl ester and acrylic acid, 2-hydroxyisopropyl ester. It may contain up to 25 % (m/m) of acrylic acid, 2-hydroxyisopropyl ester (CAS No 0002918-23-2).	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0001072-63-5	**1-Ethenyl-1H-imidazole (*i.e.* 1-vinylimidazole)**	0.05				
0001076-97-7	**1,4-Cyclohexanedicarboxylic acid**	5			Only to be used in polyester resin.	
0001120-36-1	**1-Tetradecene**	0.05				
0001141-38-4	**2,6-Naphthalenedicarboxylic acid**	0.05				
0001187-93-5	**Perfluoromethyl perfluorovinyl ether**	0.05			Only to be used in: anti-stick coatings; fluoro- and perfluoropolymers intended for repeated use applications where the contact ratio is 1 dm^2 surface in contact with at least 150 kg food.	
0001313-82-2	**Sodium sulphide**					

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0001321-74-0	**Divinyl benzene**	nd			It may contain up to 45 % (m/m) of ethylvinylbenzene.	SML expressed as the sum of divinylbenzene and ethylvinylbenzene. Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0001455-42-1	**2,4,8,10-Tetraoxaspiro-[5,5]-undecane-3,9-diethanol, β3,β3,β9,β9-tetramethyl- ('SPG')**	5			Only to be used as a monomer in the production of polyesters. The migration of oligomers of less than 1000 Da shall not exceed 50 µg/kg food (expressed as SPG).	When used in contact with non-alcoholic foods for which Table 2 of Annex III of Commission Regulation (EC) No 10/2011 assigns food simulant D1, food simulant C shall be used for verification of compliance instead of food simulant D1. When a final material or article containing this substance is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified in column 10 of Table 1 of Commission Regulation (EC) No 10/2011 shall form part of the supporting documentation referred to in Article 16 of Commission Regulation (EC) No 10/2011. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0001459-93-4	**1,3-Benzenedicarboxylate; (*i.e.* isophthalic acid, dimethyl ester)**	0.05				
0001477-55-0	**1,3-Bis-(aminomethyl) benzene**	0.05	34	0.05 (Expressed as 1,3-benzenedi methanamine)		
0001547-26-8	**2,3,3,4,4,5, 5-Heptafluoro-1-pentene**				Only to be used together with tetrafluoroethylene and/or ethylene co-monomers to manufacture fluorocopolymers for application as polymer processing aid at up to 0.2 % w/w of the food contact material, and when the low-molecular mass fraction below 1500 Da in the fluorocopolymer does not exceed 30 mg/kg.	
0001623-05-8	**Perfluoropropyl perfluorovinyl ether**	0.05				
0001647-16-1	**1,9-Decadiene**	0.05				
0001663-39-4	**Acrylic acid, tert-butyl ester**		22	6 (expressed as acrylic acid)		
0001675-54-3	**2,2'-((1-Methylethylidene)-bis-(4,1-phenyleneoxymethylene))-bis-oxiran**					In compliance with Commission Regulation (EC) No 1895/2005
0001679-51-2	**4-(Hydroxymethyl)-1-cyclohexene**	0.05				
0001761-71-3	**4,4'-methylenebis (cyclohexylamine)**	0.05				
0002035-75-8	**Adipic anhydride**					
0002082-81-7	**Methacrylic acid, diester with 1,4- butanediol**	0.05				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0002123-24-2	**Caprolactam, sodium salt**		4	15 (expressed as caprolactam)		
0002146-71-6	**Lauric acid, vinyl ester**					
0002156-97-0	**Acrylic acid, dodecyl ester**	0.05				There is a risk that the SML or OML could be exceeded in fatty food simulants.
0002162-74-5	**Bis-(2,6-diisopropylphenyl)-carbodiimide**	0.05			Expressed as the sum of bis-(2,6-diisopropylphenyl)-carbodiimide and its hydrolysis product 2,6-diisopropylaniline.	
0002177-70-0	**Methacrylic acid, phenyl ester**		23	6 (expressed as methacrylic acid		
0002210-28-8	**2-Methyl-2-propenoic acid, propyl ester (*i.e.* methacrylic acid, propyl ester)**		23	6 (expressed as methacrylic acid)		
0002416-94-6	**2,3,6-Trimethylphenol**	0.05				
0002425-79-8	**1,4-Butanediol-bis-(2,3-epoxypropyl) ether**	nd [or QMA: 1 mg/kg in final product (expressed as epoxy group)]			Molecular weight is 43 Da.	Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0002432-99-7	**11-Aminoundecanoic acid**	5				
0002459-10-1	**Trimethyl trimellitate**				Only to be used as a co-monomer up to 0.35 % w/w to produce modified polyesters intended to be used in contact with aqueous and dry foodstuffs containing no free fat at the surface.	Only a method for determination of the residual content of the substance in the polymer is available.
0002495-35-4	**Acrylic acid, benzyl ester**		22	6 (expressed as acrylic acid)		

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0002495-37-6	**Methacrylic acid, benzyl ester**		23	6 (expressed as methacrylic acid)		
0002499-59-4	**2-Propenoic acid, octyl ester (*i.e.* acrylic acid, n-octyl ester)**		22	6 (expressed as acrylic acid)		
0002530-85-0	**[3-(Methacryloxy)propyl]-trimethoxysilane**	0.05			Only to be used as a surface treatment agent of inorganic fillers.	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method. Only a method of analysis for the determination of the residual monomer in the treated filler is available.
0002561-88-8	**Sebacic anhydride**					
0002768-02-7	**Vinyltrimethoxysilane**	0.05				Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0002855-13-2	**1-Amino-3-aminomethyl-3,5,5-trimethylcyclohexane**	6				
0002867-47-2	**Methacrylic acid, 2-(dimethylamino)-ethyl ester**	nd				
0002998-08-5	**Acrylic acid, sec-butyl ester**		22	6 (expressed as acrylic acid)		

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0002998-18-7	**Methacrylic acid, sec-butyl ester**		23	6 (expressed as methacrylic acid)		
0003010-96-6	**2,2,4,4-Tetramethylcyclobutane-1,3-diol**	5			Only for: (a) repeated use articles for long term storage at room temperature or below and hot fill; (b) single use materials and articles as a co-monomer at a maximum use level of 35 mole % of the diol component of polyesters, and if such materials and articles are for long term storage at room temperature or below of food types which have an alcohol content of up to 10 % and for which Table 2 of Annex III does not assign simulant D2. Hot fill conditions are allowed for such single-use materials and articles.	
0003173-53-3	**Cyclohexyl isocyanate**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0003173-72-6	**1,5-Naphthalene diisocyanate**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0003195-78-6	**N-Vinyl-N-methylacetamide**	0.02				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0003238-40-2	**Furan-2,5-dicarboxylic acid**	5			Only to be used as a monomer in the production of polyethylene furanoate. The migration of the oligomeric fraction of less than 1000 Da shall not exceed 50 µg/ kg food (expressed as furan-2,5-dicarboxylic acid).	When used in contact with non-alcoholic foods for which Table 2 of Annex III of Commission Regulation (EC) No 10/2011 assigns food simulant D1, food simulant C shall be used for verification of compliance instead of food simulant D1. When a final material or article containing this substance is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified in column 10 of Table 1 of Commission Regulation (EC) No 10/2011 shall form part of the supporting documentation referred to in Article 16 of Commission Regulation (EC) No 10/2011. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.
0003290-92-4	**2-Ethyl-1,3-dimethacryloxy-2-(methacryloxymethyl) propane (*i.e.* 1,1,1-trimethylolpropane trimethacrylate)**	0.05				
0003634-83-1	**1,3-Bis(isocyanatomethyl) benzene**		34	0.05 (Expressed as 1,3-benzene-dimethanamine)	SML(T) applies to the migration of its hydrolysis product, 1,3-benzenedimethanamine. To be used only as co-monomer in the manufacture of a middle layer coating on a poly(ethylene terephthalate) polymer film in a multilayer film.	

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0003710-30-3	**1,7-Octadiene**	0.05			Only to be used as a crosslinking co-monomer in the manufacture of polyolefins for contact with any type of foods for long term storage at room temperature, including when packaged under hot-fill conditions.	
0003724-65-0	**2-Butenoic acid (*i.e.* crotonic acid)**		35	0.05 (expressed as crotonic acid)		
0003965-55-7	**3,5-Bis-(methoxycarbonyl) benzenesulphonic acid sodium salt**	0.05				
0004074-90-2	**Adipic acid, divinyl ester**	nd [or QMA: 5 mg/kg in final product]			Only to be used as co-monomer.	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0004098-71-9	**1-Isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0004128-73-8	**Diphenylether-4,4′-diisocyanate**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0004196-95-6	**Azelaic anhydride**					
0004422-95-1	**1,3,5-Benzenetricarboxylic acid chloride**	0.05 (expressed as 1,3,5-benzene tricarboxylic acid; trimesic acid)				
0004457-71-0	**3-Methyl-1,5-pentanediol**	0.05			Only to be used in materials in contact with food at a surface to mass ratio up to 0.5 dm^2/kg.	

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0004655-34-9	**Methacrylic acid, isopropyl ester**		23	6 (expressed as methacrylic acid)		
0004767-03-7	**2,2-Bis(hydroxymethyl) propionic acid**	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0005124-30-1	**1,1-Methylene bis (4-isocyanatocyclohexane)**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0005873-54-1	**Diphenylmethane-2,4′-diisocyanate**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0006607-41-6	**2-Phenyl-3,3-bis-(4-hydroxyphenyl)-phthalimidine**	0.05			To be used only as a co-monomer in polycarbonate copolymers.	The substance contains aniline as an impurity; verification of compliance with the restriction set for primary aromatic amines in Annex II of Commission Regulation (EC) No 10/2011 is necessary
0006864-37-5	**3,3′-Dimethyl-4,4′-diaminodicyclohexylmethane**	0.05			Only to be used in polyamides.	Compliance testing when there is a fat contact shall be performed using isooctane as substitute of simulant D2 (unstable).
0006915-15-7	**Malic acid**				In case of use as a monomer only to be used as a co-monomer in aliphatic polyesters up to maximum level of 1 % on a molar basis.	

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Monomers positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0007456-68-0	4,4′-Oxybis-(benzenesulphonyl azide)	0.05				
0007664-38-2	Phosphoric acid					
0007664-41-7	Ammonia					
0007732-18-5	Water				In compliance with Directive 98/83/EC.	
0007782-50-5	Chlorine					
0008001-22-7	Soybean oil					
0008001-79-4	Castor oil					
0008050-09-07	Rosin					
0008052-10-6	Tall oil rosin					
0009004-34-6	Microcrystallin cellulose (*i.e.* cellulose)					
0009004-70-0	Nitrocellulose					
0009005-25-8	Edible starch					
0009006-04-6	Rubber, natural					
0010043-35-3	Boric acid		16	6 (expressed as boron)		
0010595-80-9	Methacrylic acid, 2-sulphoethyl ester	nd				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0011132-73-3	**Lignocellulose**					
0012542-30-2	**Acrylic acid, dicyclopentenyl ester**	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0013811-50-2	**N,N′-Divinyl-2-imidazolidinone**	0.05				Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0015214-89-8	**2-Acrylamido-2-methylpropanesulphonic acid**	0.05				
0016219-75-3	**5-Ethylidene-2-norbornene (*i.e.* 5-ethylidenebicyclo-[2,2,1]-hept-2-ene)**	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of analytical method for migration testing. The ratio surface to quantity of food shall be lower than 2 dm^2/kg.
0016712-64-4	**6-Hydroxy-2-naphthalenecarboxylic acid**	0.05				
0018085-02-4	**3,4-Benzenediol, diacetate-1-butene (*i.e.*3,4-diacetoxy-1-butene)**	0.05 (including its hydrolysate 3,4-dihydroxyl-1-butene)				Only a method for determination of the residual content of the substance in the polymer is available. There is a risk that the OML could be exceeded in direct contact with aqueous foods from ethylvinylalcohol (EVOH) and polyvinylalcohol (PVOH) copolymers

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0019430-93-4	**(Perfluorobutyl)ethylene**				Only to be used as a co-monomer up to 0.1 % w/w in the polymerisation of fluoropolymers, sintered at high temperatures.	
0024800-44-0	**Tripropylene glycol**					
0025322-68-3	**Polyethylene glycol**		2	30		
0025322-69-4	**Polypropylene glycol**					
0025513-64-8	**Mixture of (35 %~45 % w/w) 1,6-diamino-2,2,4-trimethylhexane and (55 %~65 % w/w) 1,6-diamino-2,4,4-trimethylhexane**	0.05				
0026747-90-0	**2,4-Toluene diisocyanate dimer**	QMA: 1 mg/kg in final product (expressed as isocyanate moiety)	17	nd (0.01 mg/kg, expressed as isocyanate moiety)		Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.
0026896-48-0	**Tricyclodecanedimethanol**	0.05				
0026914-43-2	**Styrenesuphonic acid**	0.05				
0027955-94-8	**1,1,1-Tris-(4-hydroxyphenol)-ethane**	0.005			Only to be used in polycarbonates.	
0036653-82-4	**1-Hexadecanol**					
0038103-06-9	**2,2-Bis-(4-hydroxyphenyl)-propane bis-(phthalic anhydride)**	0.05				
0047465-97-4	**3,3-Bis-(3-methyl-4-hydroxyphenyl)-2-indolinone**	1.8				

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0054276-35-6	**Methacrylic acid, sulphopropyl ester**	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0061788-47-4	**Fatty acids, coco**					
0061788-89-4	**Acids, fatty, unsaturated (C18), dimers, non-hydrogenated, distilled and non-distilled**		18	0.05 (expressed as the sum of the substances)		Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0061790-12-3	**Tall oil fatty acid**					
0068308-53-2	**Fatty acids, soya**					
0068425-17-2	**Syrups, hydrolysed starch, hydrogenated**				In compliance with the purity criteria for maltitol syrup E 965(ii) as laid down in Commission Directive 2008/60/ EC.	
0068564-88-5	**N-heptylaminoundecanoic acid**	0.05				There is a risk that the SML or OML could be exceeded in fatty food simulants.
0068783-41-5	**Acids, fatty, unsaturated (C18), dimers, hydrogenated, distilled and non-distilled**		18	0.05		SML(T) expressed as the sum of the substances. Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0073138-82-6	**Resin acids and rosin acids**					
0080181-31-3	**3-Hydroxybutanoic acid-3-hydroxypentanoic acid, copolymer**		35	0.05 (expressed as crotonic acid)	The substance is used as product obtained by bacterial fermentation. In compliance with the specifications mentioned in the Table 4 of Annex I of Commission Regulation (EC) No 10/2011.	

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0080512-44-3	**2,4,4′-Trifluorobenzophenone**				Only to be used as a co-monomer in the manufacture of polyether ether ketone plastics up to 0.3 % w/w of the final material.	
0084434-12-8	**N-(2-aminoethyl)-β-alanine, sodium salt**	0.05				
0106246-33-7	**4,4′-Methylene-bis-(3-chloro-2,6- diethylaniline)**	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.
0132459-54-2	**N, N′-Bis[4-(ethoxycarbonyl) phenyl]-1,4,5,8-naphthalenetetracarboxydiimide**	0.05			Purity > 98.1 % w/w. Only to be used as co-monomer (max 4 %) for polyesters (PET, PBT).	
0156065-00-8	**α-Dimethyl-3-(4'-hydroxy-3'- methoxyphenyl) propylsilyloxy, ω-3-dimethyl-3-(4'-hydroxy-3'-methoxyphenyl)propylsilyl polydimethylsiloxane**	0.05	33	nd (expressed as eugenol)	Only to be used as comonomer in siloxane modified polycarbonate. The oligomeric mixture shall be characterised by the formula $C_{24}H_{38}Si_2O_5(SiOC_2H_6)_n$ $(50 > n \geq 26)$.	
0266309-43-7	**Albumin**					
0023985-75-3	**1,2,3,4-Tetrahydronaphthalene-2,6-dicarboxylic acid, dimethyl ester**	0.05			Only to be used as a co-monomer in the manufacture of a polyester non-food contact layer in a plastic multilayer material, which is to be used only in contact with foods for which food simulants A, B, C and/or D1 are assigned in Table 2 of Annex III of Commission Regulation (EC) No 10/2011. The specific migration limit refers to the sum of the substance and of its dimers (cyclic and open chain).	

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Monomers positive list						
CAS No	**Substance name**	**SML (and/or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0002530-83-8	**[3-(2,3-Epoxypropoxy) propyl]-trimethoxy silane**				Only to be used as a component of a sizing agent to treat glass fibres to be embedded in glass-fibre-reinforced low diffusivity plastics (polyethylene terephthalate (PET), polycarbonate (PC), polybutylene terephthalate (PBT), thermoset polyesters and epoxy bisphenol vinylester) in contact with all foodstuffs. In treated glass fibres, residues of the substance must not be detectable at 0.01 mg/kg for the substance and 0.06 mg/kg for each of the reaction products (hydrolysed monomers and epoxy-containing cyclic dimer, trimer and tetramer).	
0147398-31-0	**Poly[(*R*)-3-hydroxybutyrate-*co*-(*R*)-3-hydroxyhexanoate]**		35	0.05 (expressed as crotonic acid)	Only to be used either alone or blended with other polymers in contact with all foods under contact conditions of up to 6 months and/or 6 months and more, at room temperature or below, including hot fill or a short heating up phase. The migration of all oligomers with a molecular weight below 1 000 Da together shall not exceed 5.0 mg/kg food.	When a final material or article containing this substance is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified 'restrictions and specifications' of this table shall form part of the supporting documentation referred to in Article 16 Commission Regulation (EC) No. 10/2011. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.

c) Additives positive list

Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**(Butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with 1,3-butanediol dimethacrylate, in nanoform**				Only to be used as particles in non-plasticized PVC up to 10 % w/w in contact with all food types at room temperature or below, including long-term storage. When used together with the substance with [(butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with divinylbenzene, in nanoform] and/ or [(butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer not cross-linked, in nanoform], the restriction of 10 % w/w applies to the sum of those substances. The diameter of particles shall be > 20 nm, and for at least 95 % by number it shall be > 40 nm.									China and Japan
-	**(Butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with divinylbenzene, in nanoform**				Only to be used as particles in non-plasticized PVC up to 10 % w/w in contact with all food types at room temperature or below including long-term storage. When used together with [(butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer not cross-linked, in nanoform] and/ or [(butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with 1,3-butanediol dimethacrylate, in nanoform], the restriction of 10 % w/w applies to the sum of those substances. The diameter of particles shall be > 20 nm, and for at least 95 % by number it shall be > 40 nm.									China and Japan

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471 The restriction of use of some additives depends on the resin used. Each resin is classified into a determined resins category (Resin categories: 1 to 7). To know in which category is included a specific resin, check its category number in the column “Resin category” of the “Polymers positive list” (part 5a) of this annex). If the used resin has not an assigned category number, these restrictions do not apply.
Remarks:
“*“ –There are no restrictions on the use.
“-” –The additive cannot be used.
Empty cell – These restrictions do not apply.

Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**(Butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer not cross-linked, in nanoform**				Only to be used as particles in non-plasticized PVC up to 10 % w/w in contact with all food types at room temperature or below including long-term storage. When used together with [(butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with divinylbenzene, in nanoform] and/or [(butadiene, ethyl acrylate, methyl methacrylate, styrene) copolymer crosslinked with 1,3-butanediol dimethacrylate, in nanoform], the restriction of 10 % w/w applies to the sum of those substances. The diameter of particles shall be > 20 nm, and for at least 95 % by number it shall be > 40 nm.									China and Japan
-	**(Butadiene, styrene, methyl methacrylate) copolymer crosslinked with 1,3-butanediol dimethacrylate**				Only to be used in rigid poly(vinyl chloride) (PVC) at a maximum level of 12 % at room temperature or below.									China and Japan
-	**(Butadiene, styrene, methyl methacrylate, butyl acrylate) copolymer cross-linked with divinylbenzene or 1,3-butanediol dimethacrylate**				Only to be used in rigid poly(vinyl chloride) (PVC) at a maximum level of 12 % at room temperature or below.									China and Japan
-	**(Butyl acrylate, methyl methacrylate) copolymer, cross-linked with allyl methacrylate**				**EU:** Only to be used in rigid poly(vinyl chloride) (PVC) at a maximum level of 7 % w/w. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	–	–	10		China
-	**(Methacrylic acid, ethyl acrylate, n-butyl acrylate, methyl methacrylate and butadiene) copolymer in nanoform**				Only to be used up to: (a) 10 % w/w in non-plasticized PVC; (b) 15 % w/w in non-plasticized PLA. The final material shall be used at room temperature or below.									China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	(Polyethylene terephthalate, hydroxylated polybutadiene, pyromellitic anhydride) copolymer				Only to be used in polyethylene terephthalate (PET) at a maximum level of 5 % w/w.									China and Japan
-	5,7-Di-tert-butyl-3-(3,4- and 2,3-dimethylphenyl)-3H-benzofuran- 2-one containing: a) 5,7-di-tert- butyl-3-(3,4-dimethylphenyl)-3H-benzofuran-2-one (80 to 100 % w/w) and b) 5,7-di-tert-butyl-3-(2,3-dimethylphenyl)-3H-benzofuran- 2-one (0 to 20 % w/w)	5												China and Japan
-	9,10-Dihydroxy stearic acid and its oligomers	5			**Japan:** for each category of resins, check the maximum usage level.	–	–	10	1	–	–	–		China
-	Acetylacetic acid, salts													China and Japan
-	Acetylated mono- and diglycerides of fatty acids		EU: 32	EU: 60									**EU:** SML(T) expressed as the sum of substances.	Japan
-	Acids, aliphatic, monocarboxylic (C6-C22), esters with polyglycerol				**Japan:** see entries of followings related additives allowed “ester of fatty acid (C=6-22) with glycerol homopolymer (excluding diglycerol)” CAS N° (9009-32-9; 70644-94-9; 87390-32-7); “ester of ricinoleic acid with glycerol homopolymer (excluding diglycerol)”; and ester of fatty acid from vegetable oil with glycerol homopolymer (excluding diglycerol) CAS n° (68953-55-9)									China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Acids, C2-C24, aliphatic, linear, monocarboxylic from natural oils and fats, and their mono-, di- and triglycerol esters (branched fatty acids at naturally occurring levels are included)**				**Japan:** see entry of following related additive allowed "ester of fatty acid (C=2-24) with glycerol or diglycerol" CAS nº (123-94-4; 11099-07-3; 18641-57-1; 25496-72-4; 26402-26-6; 30233-64-8; 31566-31-1; 59029-17-3; (0067254-73-3); 67701-33-1; 68424-61-3; 91052-47-0; 99880-64-5)									China and Japan
-	**Acids, C2-C24, aliphatic, linear, monocarboxylic, from natural oils and fats, lithium salt**				**Japan:** see entries of following related additives allowed "fatty acid (C=8-22), lithium salt" CAS nº (4485-12-5; 4499-91-6; 20336-96-3; 27253-30-1); and "Fatty acid from vegetable oil and fat, lithium salt"									China and Japan
-	**Acids, C2-C24, aliphatic, linear, monocarboxylic, synthetic and their mono-, di- and triglycerol esters**				**Japan:** see entry of following related additive allowed "ester of fatty acid (C=2-24) with glycerol or diglycerol" CAS nº (123-94-4; 11099-07-3; 18641-57-1; 25496-72-4; 26402-26-6; 30233-64-8; 31566-31-1; 59029-17-3; (0067254-73-3); 67701-33-1; 68424-61-3; 91052-47-0; 99880-64-5)									China and Japan
-	**Acids, fatty (C8-C22) from animal or vegetable fats and oils, esters with alcohols, linear, aliphatic, monohydric, saturated, primary (C1-C22)**				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	30	5	5	5	**Japan:** ester of fatty acid (unsaturated C=4-22) with aliphatic monohydric alcohol (linear C=1-18) are allowed additives.	China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Acids, fatty (C8-C22) from animal or vegetable fats and oils, esters with branched alcohols, aliphatic, monohydric, saturated, primary (C3-C22)**				**Japan:** for each category of resins, check the maximum usage level.	20	0.05	3	30	2	2	2,5	**Japan:** ester of fatty acid (saturated C=12-22) with aliphatic monohydric alcohol (branch saturated C=3-18) CAS nº 110-27-0; 646-13-9; 22047-49-0; 29806-73-3; 29806-75-5; 31565-37-4; 91673-10-8; (0095912-88-2)) are allowed additives.	China
-	**Acids, fatty (C8-C22), esters with pentaerythritol'**													China and Japan
-	**Acids, fatty, from animal or vegetable food fats and oils**				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**Japan:** fatty acid from animal or vegetable (including sodium, magnesium, aluminium, potassium, calcium, ammonium, iron salt) (excluding "edible fatty acid from animal or vegetable oil and fat", are allowed additives.	China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Al, ammonium, Ba, Ca, Co, Cu, Eu, Fe Gd, La, Li, Mg, Mn, K, Na, Tb and Zn salts of authorized acids, phenols or alcohols**				**EU:** The lanthanide substances europium, gadolinium, lanthanum, and/or terbium can be used in accordance with Article 6(3)(a) provided that: (a) The sum of all lanthanide substances migrating to the food or food simulant does not exceed the specific migration limit of 0.05 mg/kg; and (b) analytical evidence using a well described methodology demonstrating that the lanthanide substance(s) used are present in dissociated ionic form in the food or the food simulant, forms part of the documentation referred to in Article 16.								**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	China and Japan
-	**Alcohols, aliphatic, monohydric, saturated, linear, primary (C4-C24)**				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	3	50	50	0.5		China
-	**Alkyl (C8-C22) sulphonic acids**	6			**Japan:** for each category of resins, check the maximum usage level.	50	50	50	3	3	3	3		China
-	**Alkyl (C8-C22) sulphuric acids, linear, primary with an even number of carbon atoms**													China and Japan
-	**Alkyl, linear with even number of carbon atoms (C12-C20) dimethylamines**	30												China and Japan
-	**Aluminium calcium hydroxide phosphite, hydrate**													China and Japan
-	**Ammonium hydrogen carbonate**				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
-	**Animal oil and fat (excluding "edible oil and fat" and specified waxes)**				**EU and China:** see entry "Fats and oils, from animal or vegetable food sources". **Japan:** for each category of resins, check the maximum usage level.	–	–	10	1	–	–	–		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Brass**				**EU:** see entry "Powders, flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron". **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		China
-	**Ca, K and Na salts (including acid and double salts) of authorized acids, phenols or alcohols.**												**China:** Na, K and Ca salts (including acid and double salts) of acids, alcohols or phenols listed in GB 9685-2016 are permitted substances subjected to the restriction requirements of the corresponding acids, alcohols or phenols. The Na, K and Ca salts (including acid and double salts) that are listed in GB 9685-2016 shall comply with the usage requirements established in the standard.	Japan
-	**Calcium ascorbate**				**Japan:** for each category of resins, check the maximum usage level.	1.6	0.3	0.5	5	0.3	0.3	0.3	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Calcium carbonate (light and heavy)**				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50	**EU:** carbonic acid salts allowed as additives or PPA. **Japan:** carbonic acid (including sodium, magnesium, aluminium, potassium, calcium, ammonium salt), are allowed additives.	
-	**Carbonic acid, salts**				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50	**Japan:** carbonic acid (including sodium, magnesium, aluminium, potassium, calcium, ammonium salt), are allowed additives.	China
-	**Castor oil, mono- and diglycerides**													China and Japan
-	**Chlorides of choline esters of coconut oil fatty acids**	0.9			**Japan:** for each category of resins, check the maximum usage level.	0.15	0.15	0.15	0.15	0.15	0.15	–	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.	China
-	**Cis-1,2-cyclohexanedicarboxylic acid, salts**	5			**Japan:** see entry "1,2-cyclohexanedicarboxylic acid, calcium salt" CAS nº 491589-22-1									China and Japan
-	**Cis-endo-bicyclo-[2.2.1]-heptane- 2,3-dicarboxylic acid, salts**	5			**EU:** Not to be used with polyethylene in contact with acidic foods. Purity ≥ 96 %.									China and Japan

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Cotton fibers**				**Japan:** allowed additive "natural fiber"	50	30	50	–	50	50	30		Japan
-	**Cresols, butylated, styrenated**	12												China and Japan
-	**Di-n-octyltin 1,4-butanediol bis(mercaptoacetate)**		10	0.006 (expressed as tin)										China and Japan
-	**Di-n-octyltin bis(ethylmaleate)**		10	0.006 (expressed as tin)										China and Japan
-	**Di-n-octyltin bis(n-alkyl(C10-C16) mercaptoacetate)**		10	0.006 (expressed as tin)	**Japan:** for each category of resins, check the maximum usage level.	–	–	–	3	–	–	–	**Japan:** tris(alkyl thioglycolate) (C=10-16) ester of monooctyltin, are additives allowed.	China
-	**Di-n-octyltin dimaleate, esterified**		10	0.006 (expressed as tin)	**Japan:** for each category of resins, check the maximum usage level.	1	–	–	5	–	–	–		China
-	**Di-n-octyltin dimaleate, polymers (n = 2-4)**		10	0.006 (expressed as tin)										China and Japan
-	**Di-n-octyltin thiobenzoate 2-ethylhexyl mercaptoacetate**		10	0.006 (expressed as tin)										China and Japan
-	**Edible oil and fat**				**EU and China:** see entry "Fats and oils, from animal or vegetable food sources". **Japan:** for each category of resins, check the maximum usage level.	15	15	20	20	15	15	10		
-	**Edible vegetable oil**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVCD and UP. **Japan:** for each category of resins, check the maximum usage level.	15	15	20	20	15	15	10	**EU:** fats and oils, from animal or vegetable food sources. **Japan:** edible oil and fat, are allowed additives.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Ester of ricinoleic acid with glycerol homopolymer (excluding diglycerol)				**EU:** See entry " Acids, aliphatic, monocarboxylic (C6-C22), esters with polyglycerol". **Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		China
-	Ethylhydroxymethyl cellulose													China and Japan
-	Ethylhydroxypropyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	0.2	0.2	0.2	0.2	0.2	0.2	0.2		China
-	Fats and oils, from animal or vegetable food sources				**Japan:** see following entries to check the specific restrictions "Vegetable oil and fat (excluding "edible oil and fat" and specified waxes)"; Animal oil and fat (excluding "edible oil and fat" and specified waxes).									
-	Fats and oils, hydrogenated, from animal or vegetable food sources				**Japan:** see following entries to check the specific restrictions "Hydrogenated animal oil and fat (excluding "hydrogenated edible oil and fat")"; "Hydrogenated vegetable oil and fat (excluding "hydrogenated edible oil and fat")"; "Hydrogenated edible oil and fat"									China
-	Fatty acid from vegetable oil and fat, lithium salt				**EU:** see entry "Acids, C2-C24, aliphatic, linear, monocarboxylic, from natural oils and fats, lithium salt". **Japan:** for each category of resins, check the maximum usage level.	0.15	0.15	10	0.15	0.15	0.15	0.15		China
-	Fatty acids, C16-18 saturated, esters with dipentaerythritol												Only to be used when produced from a fatty acid precursor that is obtained from edible fats or oils.	China and Japan
-	Glass microballs				**Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Glycerol esters with acids, aliphatic, saturated, linear, with an even number of carbon atoms (C16-C18) and with acids C18, aliphatic, unsaturated and linear.													Japan
-	Glycerol esters with erucic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with lauric acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with linoleic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with myristic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with nonanoic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with oleic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with palmitic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with ricinoleic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol esters with stearic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
-	Glycerol monooleate, ester with ascorbic acid				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		China
-	Glycerol monooleate, ester with citric acid				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
-	Glycerol monopalmitate, ester with ascorbic acid				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		China
-	Glycerol monopalmitate, ester with citric acid				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		
-	Glycerol monostearate, ester with ascorbic acid				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Glycerol monostearate, ester with citric acid				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
-	Glycerol, esters with 12-hydroxystearic acid				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
-	Glycerol, esters with acetic acid													China and Japan
-	Glycerol, esters with acids, aliphatic, saturated, linear, with an even number of carbon atoms (C14-C18) and with acids, aliphatic, unsaturated, linear, with an even number of carbon atoms (C16-C18)												**China:** Glycerides, C14-18 mono- and di-, CAS No 0067701-33-1.	Japan
-	Glycerol, esters with butyric acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		China
-	Glycerol, esters with propionic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		China
-	Glycine, salts				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–	**Japan:** glycine, sodium, potassium, magnesium, calcium salt, are allowed additives.	China
-	Ground sunflower seed hulls				**EU:** Only to be used at room temperature or below in contact with foods for which Table 2 of Annex III of Commission Regulation (EC) 10/2011 assigns food simulant E. The seed hulls shall be obtained from sunflower seeds that are fit for human consumption. The processing temperature of the plastic containing the additive shall not exceed 240°C. **Japan:** for each category of resins, check the maximum usage level.	–	–	50	–	–	–	–		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Heptanoic acid, lithium salt				**EU:** see entry "Acids, C2-C24, aliphatic, linear, monocarboxylic, from natural oils and fats, lithium salt". **Japan:** for each category of resins, check the maximum usage level.	–	–	–	0.6	–	–	–		China
-	Hydrogenated edible oil and fat				**EU:** see entry "Fats and oils, hydrogenated, from animal or vegetable food sources".	10	10	10	5	10	10	5		China
-	Hydrogenated homopolymers and/ or copolymers made of 1-hexene and/or 1-octene and/or 1-decene and/ or 1-dodecene and/or 1- tetradecene (Mw: 440-12000)				Average molecular weight not less than 440 Da. Viscosity at 100°C not less than 3,8 cSt (3,8 × 10-6 m^2/s).								There is a risk that the SML or OML could be exceeded in fatty food simulants.	China and Japan
-	Hydrogenated vegetable oil and fat (excluding "hydrogenated edible oil and fat")				**EU:** see entry "Fats and oils, hydrogenated, from animal or vegetable food sources".	50	50	50	5	50	50	50		China
-	Lysine, salts				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–	**Japan:** lysine, sodium, potassium, magnesium, calcium salt, are allowed additives.	China
-	Manganese pyrophosphite													China and Japan
-	Methylhydroxymethylcellulose				**Japan:** for each category of resins, check the maximum usage level.	–	–	50	–	–	–	–		China
-	Mixture of 4-(2-benzoxazolyl)-4'-(5-methyl-2-benzoxazolyl) stilbene, 4,4'-bis(2-benzoxazolyl) stilbene and 4,4'-bis(5-methyl-2-benzoxazolyl)stilbene				Not more than 0.05 % w/w (quantity of substance used/ quantity of the formulation). Mixture obtained from the manufacturing process in the typical ratio of (58-62 %): (23-27 %): (13-17 %). **Japan:** allowed additive "4-(2-benzoxazolyl)-4'-(5-methyl-2-benzoxazolyl)stilbene" CAS nº 5242-49-9									China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Mono-n-octyltin tris(alkyl(C10- C16) mercaptoacetate)		11	1.2 (expressed as tin)	**Japan:** for each category of resins, check the maximum usage level.	–	–	–	3	–	–	–		China
-	Montanic acid				**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5		
-	Montanic acids and/or their esters with ethyleneglycol and/or with 1,3-butanediol and/or with glycerol				**Japan:** for each category of resins, check the maximum usage level.	11	10	11	5	10	10	10		
-	Montmorillonite clay modified by dimethyldialkyl (C16-C18)ammonium chloride				Only to be used up to 12 % w/w in polyolefins in contact with dry foods to which simulant E is assigned in table 2 of Annex III at room temperature or below. The sum of the specific migration of 1-chlorohexadecane and 1-chlorooctadecane shall not exceed 0.05 mg/kg food. Can contain platelets in the nanoform that are only in one dimension thinner than 100 nm. Such platelets shall be oriented parallel to the polymer surface and shall be fully embedded in the polymer.									China and Japan
-	Montmorillonite clay modified with hexadecyltrimethylammonium bromide				Only to be used as additive at up to 4.0 % w/w in polylactic acid plastics intended for long-term storage of water at ambient temperature or below. Can form platelets in the nanoform that are in one or two dimensions thinner than 100 nm. Such platelets shall be oriented parallel to the polymer surface and shall be fully embedded in the polymer.									China and Japan
-	N,N-Bis(2-hydroxyethyl) alkyl(C8- C18)amine hydrochlorides		7	1.2 (expressed as tertiary amine)	SML(T) expressed excluding HCl									China and Japan
-	N,N-Bis(2-hydroxyethyl) alkyl(C8-C18)amine		7	1.2 (expressed as tertiary amine)	**Japan:** for each category of resins, check the maximum usage level.	4	4	50	0.1	4	2	0.1		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**n-Alkyl(C10-C13) benzenesulphonic acid**	30			**Japan:** for each category of resins, check the maximum usage level.	50	3	50	3	3	3	3		China
-	**Neodecanoic acid, salts**	0.05			**EU:** Not to be used in polymers contacting fatty foods. Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. SML expressed as neodecanoic acid.									China and Japan
-	**Neopentyl glycol, diesters and monoesters with benzoic acid and 2-ethylhexanoic acid**	5	32	60 (expressed as the sum of the substances).	**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	32	–	–	–		China
-	**Perchloric acid, salts**	0.002			**Japan:** for each category of resins, check the maximum usage level.	–	–	1.2	0.02	–	–	–	**EU:** Compliance testing when there is a fat contact shall be performed using saturated fatty food simulants as simulant D2. **China:** Only permitted sodium perchlorate (SML=0.05 mg/kg). For more info, see sodium perchlorate.	China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Petroleum hydrocarbon resins (hydrogenated)**				Petroleum hydrocarbon resins, hydrogenated are produced by the catalytic or thermal polymerisation of dienes and olefins of the aliphatic, alicyclic and/or monobenzenoidarylalkene types from distillates of cracked petroleum stocks with a boiling range not greater than 220°C, as well as the pure monomers found in these distillation streams, subsequently followed by distillation, hydrogenation and additional processing. Properties: Viscosity at 120°C > 3 Pa.s; Softening point > 95°C (as determined by ASTM Method E 28-67); Bromine number < 40 (ASTM D1159); the colour of a 50 % solution in toluene < 11 on the Gardner scale; and residual aromatic monomer ≤ 50 ppm. **Japan:** for each category of resins, check the maximum usage level.	25	50	50	5	50	50	–		China
-	**Phosphoric acid, mono- and di-n- alkyl (C16 and C18) esters**	0.05												China and Japan
-	**Phosphorous acid, tris(nonyl-and/ or dinonyl phenyl) ester**	30			**Japan:** for each category of resins, check the maximum usage level.	1.2	1.2	1	1	0.3	0.3	–		China
-	**Pimelic acid, salts**													China and Japan
-	**Polyacrylic acid, salts**		22	6 (expressed as acrylic acid)	**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10	**Japan:** polymer mainly composed of acrylic acid and/ or methacrylic acid and/or itaconic acid (including sodium, ammonium salt)" CAS nº (9003-01-4; 9003-04-7; 26099-89-8; 54193-36-1), are allowed additives.	China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Polydimethylsiloxane, γ-hydroxypropylated	6												China and Japan
-	Polyester of adipic acid with glycerol or pentaerythritol, esters with even numbered, unbranched C12-C22 fatty acids		32	60 (expressed as the sum of the substances).	The fraction with molecular weight below 1000 Da shall not exceed 5 % w/w.									China and Japan
-	Polyesters of 1,2-propanediol and/ or 1,3- and/or 1,4-butanediol and/ or polypropyleneglycol with adipic acid, which may be end- capped with acetic acid or fatty acids C12-C18 or n-octanol and/ or n-decanol		31; 32	30 (Group No. 31-expressed as the sum of the substances); 60 (Group No. 32 -expressed as the sum of the substances).	**Japan:** for each category of resins, check the maximum usage level.	20	20	20	30	20	20	–		China
-	Polyethyleneglycol (EO = 1-30, typically 5) ether of butyl-2- cyano-3-(4-hydroxyphenyl) acrylate	0.05			Only for use for the manufacture of PET.									China and Japan
-	Polyethyleneglycol (EO = 1-50) monoalkylether (linear and branched, C8-C20) sulphate, salts	5												China and Japan
-	Polyethyleneglycol (EO= 1-50) ethers of linear and branched primary (C8-C22) alcohols	1.8			In compliance with the maximum ethylene oxide content as laid down in the purity criteria for food additives in Commission Regulation (EC) No 231/2012.									China and Japan
-	Polyethyleneglycol diricinoleate	42			**Japan:** for each category of resins, check the maximum usage level.	–	0.01	10	–	–	–	–		China
-	Polyethyleneglycol esters of aliph. monocarb. acids (C6-C22) and their ammonium and sodium sulphates													China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Potassium alginate				**Japan:** for each category of resins, check the maximum usage level.	1.6	–	30	5	0.01	–	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	Potassium carbonate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
-	Potassium hydrogen carbonate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
-	Potassium lactate				**Japan:** additive allowed "lactic acid (including sodium, calcium salt)"								**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
-	Powders, flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron				**Japan:** additives allowed "brass, copper, stainless steel, tin, iron"									China and Japan
-	Propylhydroxyethyl cellulose													China and Japan
-	Propylhydroxymethyl cellulose													China and Japan
-	Propylhydroxypropyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	0.2	0.2	0.2	0.2	0.2	0.2	0.2		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Reaction product of titanium dioxide and n-octyltriethoxysilane (*i.e.* n-octyltriethoxysilane-modified titanium dioxide)				**China:** Maximum level of 25 % w/w.								**EU:** Reaction product of titanium dioxide with up to 2 % w/w surface treatment substance octyl triethoxysilane, processed at high temperatures.	Japan
-	Rosin or rosin acid, lithium salt				**EU:** see entry "Acids, C2-C24, aliphatic, linear, monocarboxylic, from natural oils and fats, lithium salt". **Japan:** for each category of resins, check the maximum usage level.	1	0.1	10	1	0.1	0.1	–		China
-	Silicates, natural (with the exception of asbestos)				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	30	40	50		China
-	Silicates, natural, silanated (with the exception of asbestos)													China and Japan
-	Silicic acid, silylated				**Japan:** for each category of resins, check the maximum usage level.	35	–	35	–	–	–	35		China
-	Silicon dioxide, silanated				**EU:** For synthetic amorphous silicon dioxide, silanated: primary particles of 1-100 nm which are aggregated to a size of 0.1-1 µm and may form agglomerates within the size distribution of 0.3 µm to the mm size. **Japan:** for each category of resins, check the maximum usage level.	50	30	35	30	30	30	35		China and Japan
-	Sodium alginate				**Japan:** for each category of resins, check the maximum usage level.	1.6	–	30	5	0.01	–	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Sodium ascorbate				**Japan:** for each category of resins, check the maximum usage level.	1.6	0.3	0.5	5	0.3	0.3	0.3	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	Sodium carbonate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
-	Sodium carboxy methyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	5	5	15	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	Sodium caseinate												**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
-	Sodium dihydrogen citrate				**Japan:** for each category of resins, check the maximum usage level.	10	20	20	5	10	10	1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	Sodium hydrogen carbonate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	Sodium lactate				**Japan:** for each category of resins, check the maximum usage level.	1	0.5	0.5	5	0.05	0.05	0.001	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	Sodium monoalkyl dialkylphenoxy benzenedisulphonate	9			**Japan:** for each category of resins, check the maximum usage level.	50	50	50	3	1.1	1.1	50		China
-	Sodium polyacrylate				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
-	Stainless steel				**EU:** see entry "Powders, flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron". **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	–		China
-	Stearic acid, esters with ethyleneglycol		2	30 (expressed as ethyleneglycol)	**Japan:** for each category of resins, check the maximum usage level.	–	–	–	0.5	–	–	–		China
-	Stearoyl-2-lactylic acid, salts				**Japan:** for each category of resins, check the maximum usage level.	0.2	5	5	0.5	5	5	–	**Japan:** only calcium salt allowed	China
-	Sulphosuccinic acid alkyl (C4-C20) or cyclohexyl diesters, salts	5			**Japan:** for each category of resins, check the maximum usage level.	50	5	50	3	3	3	1		China
-	Sulphosuccinic acid monoalkyl (C10-C16) polyethyleneglycol esters, salts	2												China and Japan
-	Taurine, salts													China and Japan
-	Tetradecyl-polyethyleneglycol (EO= 3-8) ether of glycolic acid	15												China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Titanium dioxide, coated with a copolymer of n-octyltrichlorosilane and [aminotris (methylenephosphonic acid), penta sodium salt]**				The content of the surface treatment copolymer of the coated titanium dioxide is less than 1 %.									China and Japan
-	**Titanium dioxide surface-treated with fluoride-modified alumina**				**EU:** Only to be used at up to 25.0 % w/w, including in the nanoform.								**EU:** In polar polymers which swell in contact with foods for which simulant B is assigned in Annex III, there is a risk that under severe contact conditions the migration limits for aluminium and fluoride are exceeded. Under contact conditions above 4 hours at 100ºC this exceedance can be high.	China and Japan
-	**Tricyclodecane dimethanol bis(hexahydrophthalate)**	0.05												China and Japan
-	**Trimethylolpropane, mixed triesters and diesters with benzoic acid and 2-ethylhexanoic acid**	5	32	60 (expressed as the sum of the substances).	**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	32	–	–	–		China
-	**Trimethylolpropane, mixed triesters and diesters with n- octanoic and n-decanoic acids**	0.05			**EU:** Only for use in PET in contact with all types of foods other than fatty, high-alcoholic and dairy products. **Japan:** for each category of resins, check the maximum usage level.	1	3	3	3	3	3	0.003		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Tripotassium citrate**				**Japan:** for each category of resins, check the maximum usage level.	10	20	20	5	10	10	1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	**Trisodium citrate**				**Japan:** for each category of resins, check the maximum usage level.	10	20	20	5	10	10	1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
-	**Vegetable oil and fat (excluding "edible oil and fat" and specified waxes)**				**EU and China:** see entry "Fats and oils, from animal or vegetable food sources". **Japan:** for each category of resins, check the maximum usage level. In the case of synthetic resin categories 3, 6 and 7, it should not be used in the parts that come into contact with fats and oils and fatty foods.	20	15	15	5	2	2	2		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Waxes, paraffinic, refined, derived from petroleum based or synthetic hydrocarbon feedstocks, low viscosity**	EU: 0.05			**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. Average molecular weight not less than 350 Da. Viscosity at 100°C not less than 2,5 cSt (2,5 × 10-6 m^2/s). Content of hydrocarbons with Carbon number less than 25, not more than 40 % w/w. **China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC and PVC (used according to the production demand); PET at a maximum level of 0.25 % w/w; POM at a maximum level of 0.85 % w/w; and PBT at a maximum level of 0.35 % w/w. **Japan:** for each category of resins, check the maximum usage level. The UV absorbance (maximum absorbance per 1 cm of optical path length) shall be as follows. 280~289 nm 0.15 290~299 nm 0.12 300~359 nm 0.08 360~400 nm 0.02	50	50	50	10	50	50	50	**China:** Paraffin waxes and hydrocarbon waxes (CAS No. 0008002-74-2) are approved additives.	
-	**Waxes, refined, derived from petroleum based or synthetic hydrocarbon feedstocks, high viscosity**				**EU:** Average molecular weight not less than 500 Da. Viscosity at 100°C not less than 11 cSt (11 × 10-6 m^2/s). Content of mineral hydrocarbons with Carbon number less than 25, not more than 5 % w/w. **China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC and PVC (used according to the production demand); PET at a maximum level of 0.25 % w/w; POM at a maximum level of 0.85 % w/w; and PBT at a maximum level of 0.35 % w/w. **Japan:** for each category of resins, check the maximum usage level. The UV absorbance (maximum absorbance per 1 cm of optical path length) shall be as follows. 280~289 nm 0.15 290~299 nm 0.12 300~359 nm 0.08 360~400 nm 0.02	50	50	50	10	50	50	50	**China:** Paraffin waxes and hydrocarbon waxes (CAS No. 0008002-74-2) are approved additives.	

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
-	**Wood flour and fibers, untreated**				**EU:** Bamboo additives (or bamboo fibers or ground bamboo) or similar are not covered by this entry. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	50	49	–		China
-	**Zinc oxide, nanoparticles, coated with [3-(methacryloxy)propyl] trimethoxysilane (FCM No 788)**				Only to be used in unplasticised polymers. The restrictions and specifications specified for [3-(methacryloxy)propyl]trimethoxysilane (CAS No 0002530-85-0) shall be respected.									China and Japan
-	**Zinc oxide, nanoparticles, uncoated**				**EU:** Only to be used in unplasticised polymers. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	5	30	30	30		China
0000050-00-0	**Formaldehyde**		15	15 (expressed as formaldehyde)	**Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		China
0000050-21-5	**Lactic acid**				**Japan:** for each category of resins, check the maximum usage level.	1	0.5	0.5	5	0.05	0.05	0.001		
0000050-70-4	**D-sorbitol**				**China:** Only to be used for the manufacture of PP, PS and AS. **Japan:** for each category of resins, check the maximum usage level.	–	0.5	6.5	–	–	0.5	–		
0000050-81-7	**Ascorbic acid**				**Japan:** for each category of resins, check the maximum usage level.	1.6	0.3	0.5	5	0.3	0.3	0.3		
0000056-06-4	**2,4-Diamino-6-hydroxypyrimidine**	5			**EU:** Only to be used in rigid poly(vinyl chloride) (PVC) in contact with non-acidic and non- alcoholic aqueous food. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	0.2	–	–	–		China
0000056-81-5	**Glycerol (*i.e.* glycerine)**				**China:** Only to be used for the manufacture of PET at a maximum level of 0.05 % w/w; and PE, PP, PS, AS, ABS, PA, PC, PVC and PVDC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	50	50	20	50	50	50		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000057-09-0	Hexadecyltrimethylammonium bromide	6			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS and PET.									Japan
0000057-10-3	Palmitic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China
0000057-11-4	Stearic acid (*i.e.* octadecanoic acid)				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		
0000057-55-6	1,2-Propanediol				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET, PC, PVC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	20	50	20	20	20	20	20		
0000058-95-7 / 0007695-91-2	α-Tocopherol acetate				**EU:** Only to be used as antioxidant in polyolefins. **Japan:** for each category of resins, check the maximum usage level.	1.6	–	–	–	0.05	–	–	The substance or its hydrolysis products are authorised food additives and compliance with Article 11 (3) of Commission Regulation (EC) 10/2011 shall be verified.	China
0000059-02-8 / 0010191-41-0	α-Tocopherol (*i.e.* 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,3,12-trimethyltridecyl)-2H-1-benzopyran-6-ol; or DL- a -Vitamin E)				**China:** Only to be used for the manufacture of PE, PET, PP, PA, PS, PC, AS, ABS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	2	2	2	5	1	1.5	0.5		
0000060-00-4	Edetic acid (*i.e.* ethylenediaminetetraacetic acid)				**China:** Only to be used for the manufacture of PS and PC at a maximum level of 0.05 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	2	3	1	1	1	1		
0000060-33-3	Linoleic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China

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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000062-54-4	Calcium acetate				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000064-02-8	Sodium edetate				**Japan:** for each category of resins, check the maximum usage level.	2	2	3	1	1	1	1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000064-17-5	Ethanol				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	3	50	50	50		
0000064-18-6	Formic acid				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
0000064-19-7	Acetic acid				**China:** Only to be used for the manufacture of PP, PE, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		
0000065-85-0	Benzoic acid				**China:** Only to be used for the manufacture of AS, ABS, PET, PC, PE, PP and PA6. **Japan:** for each category of resins, check the maximum usage level.	5	1	1	3	1	1	0.1		
0000067-63-0	2-Propanol (*i.e.* isopropanol)				**China:** Only to be used for the manufacture of PE, PP, PS, AS and ABS. **Japan:** for each category of resins, check the maximum usage level.	3	3	3	3	3	3	3		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000067-64-1	Acetone				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
0000067-68-5	Dimethyl sulphoxide													China and Japan
0000069-72-7	Salicylic acid				**Japan:** for each category of resins, check the maximum usage level.	0.5	–	0.0002	–	–	–	0.0002		China
0000075-37-6	1,1-Difluoroethane													China and Japan
0000075-45-6	Chlorodifluoromethane (*i.e.* Monochlorodifluoromethane)	6			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP.								Content of chlorofluoromethane less than 1 mg/kg of the substance	Japan
0000076-22-2	Camphor												There is a risk that the migration of the substance deteriorates the organoleptic characteristics of the food in contact and then, that the final product does not comply with Article 3(1) c of the Framework Regulation (EC) No 1935/2004.	China and Japan
0000077-62-3	2,2'-Methanediylbis[4-methyl-6-(1-methylcyclohexyl)] phenol		5	3	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	–	0.2	0.2	5	0.2	–	–	SML(T) expressed as the sum of substances	
0000077-90-7	Tri-n-butyl acetyl citrate (*i.e.* tributyl-2-(acetyloxy)propane-1,2,3-tricarboxylate)		32	60	**China:** Only to be used for the manufacture of PVC, PP, PE, PS, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	35	3	45	50	3	0.5	5	SML(T) expressed as the sum of substances	
0000077-92-9	Citric acid				**Japan:** for each category of resins, check the maximum usage level.	10	20	20	5	10	10	1		

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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000077-93-0	Citric acid, triethyl ester		32	60 (expressed as the sum of the substances).	**Japan:** for each category of resins, check the maximum usage level.	5	–	0.003	–	0.003	–	–		China
0000077-99-6	1,1,1-Trimethylolpropane (*i.e.* 2,2-dihydroxymethyl butanol; or tri(hydroxymethyl)propane; or TMP)	6			**China:** Maximum level of 0.12 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	1	1	5		
0000078-78-4 / 0000109-66-0	Isopentane (*i.e.* pentane)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.									Japan
0000079-09-4	Propionic acid				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	0.001	–	–	1	0.001	–	–		
0000084-74-2	Dibutyl phthalate (DBP)	0.3	32	60	**EU:** Only to be used as: (a) plasticiser in repeated use materials and articles contacting non-fatty foods; (b) technical support agent in polyolefins in concentrations up to 0.05 % in the final product. **China:** Only to be used for the manufacture of PVC at a maximum level of 5 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use in contact with raw meat.	10	10	30	30	0.02	0.02	–	SML(T) expressed as the sum of substances. **EU:** If testing in food is performed, Annex V 1.4 of Commission Regulation (EC) No. 10/2011 shall be taken into account. **China:** The produced materials or products shall not become in contact with fatty foods, foods with alcoholic content higher than 20 % and foods for infants.	

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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000085-44-9	Phthalic anhydride				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	–	–	–	–		
0000085-68-7	Phthalic acid, benzyl butyl ester	30	32	60 (expressed as the sum of the substances).	**EU:** Only to be used as: (a) plasticiser in repeated use materials and articles; (b) plasticiser in single-use materials and articles contacting non-fatty foods except for infant formulae and follow-on formulae as defined by Directive 2006/141/EC or processed cereal-based foods and baby foods for infants and young children as defined by Directive 2006/125/EC; (c) technical support agent in concentrations up to 0.1 % in the final product. **Japan:** for each category of resins, check the maximum usage level.	6	6	6	33	0.1	0.1	0.1	If testing in food is performed, Annex V 1.4 of Commission Regulation (EC) No. 10/2011 shall be taken into account.	China
0000087-18-3	2-Hydroxybenzoicacid-4-(1,1-dimethylethyl) phenylester (*i.e.* salicylic acid, 4-tert-butylphenyl ester)	12			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	30	1	1	1		
0000087-69-4	L-(+)-Tartaric acid				**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	5	1	1	5	1	1	1		
0000087-78-5	Mannitol													China and Japan
0000088-24-4	2,2'-Methylenebis(4-ethyl-6-tert-butylphenol)		13	1.5	**China:** Only to be used for the manufacture of PE at a maximum level of 0.5 % w/w; and PP, PS, AS and ABS at a maximum level of 0.6 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	2	1	1	–	SML(T) expressed as the sum of substances	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000088-68-6	2-Aminobenzamide	0.05			Only to be used for the manufacture of PET for water and water-based beverages. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	0.05	**China:** The produced materials or products are only used for contacting water-based foods.	
0000088-99-3	o-Phthalic acid													China and Japan
0000093-58-3	Benzoic acid, methyl ester													China and Japan
0000093-89-0	Benzoic acid, ethyl ester													China and Japan
0000094-13-3	4-Hydroxybenzoic acid, propyl ester (*i.e.* propylparaben)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS and PET at a maximum level of 0.1 % w/w; and PC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	1	1	1	0.1	0.1	0.1	0.1		
0000096-69-5	4,4'-Thiobis(6-tert-butyl-m-cresol) (*i.e.* 4,4'-thiobis(6-tert-butyl-3-methylphenol))	0.48			**China:** Only to be used for the manufacture of PE at a maximum level of 0.05 % w/w; PP and ABS at a maximum level of 0.3 % w/w; and PS and AS at a maximum level of 0.6 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		
0000097-23-4	2,2'-Methylene-bis(4-chlorophenol) (*i.e.* 2,2'-dihydroxy--5,5'-dichlorodiphenylmethane)	12			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP.									Japan
0000099-76-3	4-Hydroxybenzoic acid, methyl ester; methylparaben				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS and PET at a maximum level of 0.1 % w/w; and PC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	1	1	1	0.1	0.1	0.1	0.1		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000100-52-7	Benzaldehyde				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	1	–	–	–	There is a risk that the migration of the substance deteriorates the organoleptic characteristics of the food in contact and then, that the final product does not comply with Article 3(1) c of the Framework Regulation (EC) No 1935/2004.	China
0000100-97-0	Hexamethylenetetramine		15	15 (expressed as formaldehyde)	**China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	8	1	1	1	–	–	–		
0000102-08-9	N,N'-Diphenylthiourea	3			**Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	0.5	–	–	–		China
0000102-60-3	N,N,N',N'-tetrakis(2-hydroxypropyl) ethylenediamine				**Japan:** for each category of resins, check the maximum usage level.	–	0.15	0.15	–	–	–	–		China
0000102-71-6	Trietanolamine	0.05			**Japan:** for each category of resins, check the maximum usage level.	5	5	5	0.5	0.5	0.5	0.5	SML expressed as the sum of triethanolamine and the hydrochloride adduct expressed as triethanolamine	China
0000103-23-1 / 0000123-79-5	Adipic acid, bis(2-ethylhexyl) ester (*i.e.* di(2-ethylhexyl) adipate: dioctyl adipate)	18	32	60 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC and PVC at a maximum level of 35 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	40	5	5	0.03	There is a risk that the SML or OML could be exceeded in fatty food simulants.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000105-60-2	Caprolactam		4	15 (expressed as caprolactam)	**Japan:** for each category of resins, check the maximum usage level.	3	1	3	–	0.001	–	–		China
0000105-62-4	1,2-Propyleneglycol dioleate				**Japan:** for each category of resins, check the maximum usage level.	3	3	10	5	3	3	3		China
0000106-14-9	12-Hydroxystearic acid				**China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	3	2	2	0.5		
0000106-97-8 / 0000075-28-5	Butane (*i.e.* isobutane)				**EU:** Only to be used as blowing agent. **China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	10	50	50	10		
0000107-21-1	1,2-Ethanediol		2	30 (expressed as ethyleneglycol)	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	2	2	20	0.5	0.2	0.3	0.2		
0000108-24-7	Acetic anhydride				**Japan:** for each category of resins, check the maximum usage level.	5	0.05	0.05	–	–	–	–		China
0000108-78-1	1,3,5-Triazine-2,4,6-triamine (*i.e.* melamine)	2.5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.1 % w/w; and POM at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1.5	–	0.01	–	–	0.1	0.01	**China:** The usage temperature of produced POM materials and articles shall not exceed 100°C. SML of melamine shall not exceed 1 mg/kg in materials and articles intended to become in contact with foods for infants.	
0000108-91-8	Cyclohexylamine													China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000109-43-3	Dibutyl sebacate		32	60 (expressed as the sum of the substances).	**China:** Only to be used for the manufacture of PS, ABS, PC and PVDC **Japan:** for each category of resins, check the maximum usage level.	5	0.5	12	35	0.5	–	–		
0000109-66-0	Pentane													China and Japan
0000110-15-6	Succinic acid				**Japan:** for each category of resins, check the maximum usage level.	1.6	10	10	5	10	10	0.001		China
0000110-16-7	Maleic acid		3	30 (expressed as maleic acid)										China and Japan
0000110-17-8	Fumaric acid				**China:** Only to be used for the manufacture of PE and PS. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
0000110-30-5	N, N'-1,2-ethanediylbis-Octadecanamide (*i.e.* N,N'-ethylenebisstearamide)				**China:** Only to be used for the manufacture of PEI and ABS at a maximum level of 3 % w/w; PA at a maximum level of 0.2 % w/w; PLA at a maximum level of 1 % w/w; PVC, PE, PS, PP, EVOH and AS at a maximum level of 2 % w/w; and PET, POM, PVDC, UP, PC, PPE and PBT (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	3	50	5	3	2	1.5		
0000110-31-6	N, N'-ethylenebisoleamide (*i.e.* N,N'-1,2-ethanediylbis-(Z,Z)-9-octadecenamide)				**China:** Only to be used for the manufacture of PE at a maximum level of 0.5 % w/w; PP, AS and ABS at a maximum level of 2 % w/w; PS at a maximum level of 0.4 % w/w; and PA, PET and PC at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	3	50	5	3	2	1.5		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000110-44-1	(E, E)-2, 4-Hexadienoic acid (*i.e.* sorbic acid)				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, AS, PA, PET, PC and PVC. **Japan:** for each category of resins, check the maximum usage level.	2	2	2	1	2	2	1		
0000110-63-4	1, 4-Butanediol		30	5 (expressed as 1,4-butanediol)	**Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		China
0000110-94-1	Glutaric acid													China and Japan
0000110-98-5 / 0025265-71-8	Dipropyleneglycol (*i.e.* Oxydipropanol)				**China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	5	2	5	2	0.001	0.001	0.01		
0000111-06-8	Palmitic acid, butyl ester													China and Japan
0000111-14-8	Heptanoic acid				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	1	–	–	–		China
0000111-41-1	N-(2-aminoethyl) ethanolamine	0.05			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA and PC. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	–	Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. For indirect food contact only, behind a PET layer.	
0000111-46-6	Diethylene glycol		2	30 (expressed as ethyleneglycol)	**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		China
0000112-27-6	Triethylene glycol		2	China: 30	**China:** Only to be used for the manufacture of PET and PC. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
0000112-60-7	Tetraethyleneglycol													China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000112-80-1	Oleic acid (*i.e.* cis-9-octadecenoic acid; or (Z)-9-octadecenoic acid)				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, AS, PA, PET, PC and PVC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		
0000112-84-5	Erucamide (*i.e.* cis-13-docosenamide)				**China:** Only to be used for the manufacture of PB-1 at a maximum level of 0.3 % w/w; and PE, PP, PVDC, PLA (used appropriately according to the production demand); and PVC at a maximum level of 1 % (shall not be used for the manufacture of PVC articles in contact with food with ethanol content higher than 20 % and fatty foods and the usage temperature shall be lower than 126ºC). **Japan:** for each category of resins, check the maximum usage level.	50	8	50	6	8	10.5	50		
0000112-85-6	Behenic acid				**China:** Only to be used for the manufacture of PE. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		
0000112-86-7	Erucic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China
0000115-77-5	Pentaerythritol				**Japan:** for each category of resins, check the maximum usage level.	3	3	3	0.4	3	3	–		China
0000115-96-8	Phosphoric acid, trichloroethyl ester	nd												China and Japan

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000117-81-7	Bis(2-ethylhexyl) phthalate	1.5	32	60 (expressed as the sum of the substances).	**EU:** Only to be used as (a) plasticiser in repeated use materials and articles contacting non-fatty foods; (b) technical support agent in concentrations up to 0.1 % in the final product. **China:** Only to be used for the manufacture of PVC at a maximum level of 5 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come into contact with fats and oils or fatty foods.	5	30	30	50	30	30	30	The produced materials or products shall not contact with the fatty foods, foods with ethanol content higher than 20 % and foods for infants. **EU:** If testing in food is performed, Annex V 1.4 of Commission Regulation (EC) 10/2011 shall be taken into account.	
0000119-36-8	Methyl salicylate	30			**Japan:** for each category of resins, check the maximum usage level.	0.4	–	0.4	0.4	–	–	–		China
0000119-47-1	2,2'-Methylene bis(4-methyl-6- tert-butylphenol)		13	1.5 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.1 % w/w; PS at a maximum level of 0.4 % w/w; AS at a maximum level of 0.6 % w/w; ABS at a maximum level of 1 % w/w; POM at a maximum level of 0.5 % w/w; TPC-ET at a maximum level of 5 % w/w; and PA (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	1	2	2	2	0.1	0.1	–		
0000119-61-9	Benzophenone	0.6			**Japan:** for each category of resins, check the maximum usage level.	1	1	5	–	–	–	–		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000120-40-1	N,N-Bis(2-hydroxyethyl)-dodecanamide	5			**EU:** The residual amount of diethanolamine in plastics, as an impurity and decomposition product of the substance, shall not result in a migration of diethanolamine higher than 0.3 mg/kg food. **China:** Only to be used for the manufacture of PE and PP (maximum allowed manufacture 0.8 % w/w; PS and AS at a maximum level of 1.5 % w/w; and ABS maximum allowed manufacture 2.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	3	3	0.5	3	0.8	0.8	**EU:** There is a risk that the SML could be exceeded from low-density polyethylene (LDPE).	
0000120-47-8	4-Hydroxybenzoic acid, ethyl ester				**Japan:** for each category of resins, check the maximum usage level.	1	0.002	1	1	0.002	0.002	0.002		China
0000121-79-9	3, 4, 5-Trihydroxybenzoic acid propyl ester (*i.e.* gallic acid, propyl ester)		20	30 (expressed as the sum of substances)	**Japan:** for each category of resins, check the maximum usage level.	1.6	0.001	0.001	5	0.001	–	–		China
0000122-20-3	Triisopropanolamine	5			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA and PET at a maximum level of 0.15 % w/w; and PC at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use in parts with a thickness of more than 0.1 mm that come into contact with food at temperatures above 100°C.	10	10	10	1	4	1	1		
0000123-28-4	Dilauryl 3,3'-thiodipropionate (*i.e.* thiodipropionic acid, didodecyl ester)		14	5 (expressed as the sum of the substances and their oxidation products)	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET, PC at a maximum level of 0.5 % w/w; and PVC, PVDC, PBT, POM, PA and TPC-ET (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	5	5	10	30	5	5	5		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000123-31-9	1,4-Dihydroxybenzene (*i.e.* hydroquinone)	0.6			**China:** Only to be used for the manufacture of PET and UP at a maximum level of 0.08 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.2	–	–	–	–	–	–		
0000123-76-2	Levulinic acid													China and Japan
0000123-86-4	Butyl acetate				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	–	5	5	–		China
0000123-94-4; 11099-07-3; 18641-57-1; 25496-72-4; 26402-26-6; 30233-64-8; 31566-31-1; 59029-17-3; (0067254-73-3); 67701-33-1; 68424-61-3; 91052-47-0; 99880-64-5	Ester of fatty acid (C=2-24) with glycerol or diglycerol				**EU:** See entry "Acids, C2-C24, aliphatic, linear, monocarboxylic from natural oils and fats, and their mono-, di- and triglycerol esters (branched fatty acids at naturally occuring levels are included)". **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000123-95-5	Butyl stearate (*i.e.* stearic acid butyl ester)				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PA, PET, PC, PVC and PVDC –food contact materials or products intended for contact with non-fatty foodstuffs– at a maximum level of 5 % w/w; and AS –all types of foodstuffs– at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	5	50	40	5	5	50	**China:** PE, PP, PS, ABS, PA, PET, PC, PVC and PVDC food contact materials or products that contain a maximum of 5 % of this substance must only be used in contact with non-fatty foodstuffs. Food contact materials and products made of AS which include a maximum of 0.25 % of this additive must not be used above 100ºC. Food contact materials and products made of AS which include from 0.25 % to 5 % of this additive must only be used in contact with non-fatty foodstuffs.	
0000124-04-9	Adipic acid (*i.e.* hexanedioic acid)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1	–	1.2	0.2	0.001	0.1	–		
0000124-07-2	Caprylic acid (*i.e.* octanoic acid)				**China:** Only to be used for the manufacture of PE, PET, PA, PP, PS, AS, ABS, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000124-26-5	Stearamide				**China:** Only to be used for the manufacture of PE, PP, PVC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	8	50	6	8	10.5	50		
0000124-38-9	Carbon dioxide				**Japan:** for each category of resins, check the maximum usage level.	*	*	*	*	*	*	*		China
0000126-13-6	Sucrose acetate isobutyrate (*i.e.* a-D-Glucopyranoside, 6-O-acetyl-1,3,4-tris-O-(2-methyl-1-oxopropyl)-b-D-fructofuranosyl-6-acetate 2,3,4-tris(2-methylpropanoate))				**China:** Only to be used for the manufacture of PS at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		
0000126-14-7	Sucrose octaacetate				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		China
0000126-58-9	Dipentaerythritol				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	3	–	–	–		China
0000127-08-2	Potassium acetate				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000127-09-3	Sodium acetate				**China:** Only to be used for the manufacture of PET and EVOH. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000127-63-9	Diphenyl sulphone	3												China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000128-37-0	Butylated hydroxytoluene (BHT) (*i.e.* 2,6-di-tert-butyl-p-cresol)	3			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.5 % w/w; PS, AS, ABS and UP at a maximum level of 1 % w/w; and PA, PET, PC, PVC and PVDC at a maximum level of 0.13 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		
0000128-44-9	1,2-Benzisothiazol-3(2H)-one 1,1- dioxide, sodium salt				**EU:** The substance shall comply with the specific purity criteria as set out in Commission Regulation (EC) No 231/2012. **Japan:** for each category of resins, check the maximum usage level.	–	–	0.1	–	–	0.02	0.1		China
0000131-53-3	2,2'-Dihydroxy-4-methoxybenzophenone		8	6 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PP, PE and PET at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
0000131-56-6	2,4-Dihydroxybenzophenone		8	6 (expressed as the sum of the substances)										China and Japan
0000131-57-7	2-Hydroxy-4-methoxy-benzophenone		8	6 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE, ABS and PET at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.3	0.3	0.5	0.3	–	0.3		
0000136-60-7	Benzoic acid, butyl ester													China and Japan
0000137-66-6	Ascorbyl palmitate				**Japan:** for each category of resins, check the maximum usage level.	0.04	0.04	0.04	0.04	0.04	0.04	0.04		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000138-09-0	L-(-)-malic acid disodium salt												**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
0000138-22-7	Lactic acid, butyl ester													China and Japan
0000139-33-3	Edetic acid disodium salt				**China:** Only to be used for the manufacture of PVDC at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	2	3	1	1	1	1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000141-22-0	Ricinoleic acid	42												China and Japan
0000141-43-5	Ethanolamine	0.05			**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. For indirect food contact only, behind a PET layer. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come into contact with fats and oils or fatty foods.	0.6	0.6	1.25	0.3	0.3	0.3	0.3		China
0000141-78-6	Ethyl acetate				**Japan:** for each category of resins, check the maximum usage level.	15	–	10	–	0.001	0.001	0.001		China
0000141-82-2	Malonic acid				**Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	–	–	–	–		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000142-17-6	Calcium oleate				**China:** Only to be used for the manufacture of PE, PP, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000142-62-1	Hexanoic acid													China and Japan
0000142-72-3 / 0016674-78-5	Magnesium acetate (*i.e.* magnesium acetate tetrahydrate)				**China:** Only to be used for the manufacture of EVOH at a maximum level of 1 % w/w –calculated as magnesium acetate–; and polyester resin (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000143-07-7	Lauric acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China
0000143-19-1	9-Octadecenoic acid (Z)-, sodium salt (*i.e.* sodium oleate)	China: 2			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 20 mg/m^2. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000143-28-2	Oleyl alcohol (*i.e.* cis-9-octadecenol)				**China:** Only to be used for the manufacture of PVC lid gasket at a maximum level of 1 % w/w; and other PVC product at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	3	3.2	3	3	3	0.5		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000144-62-7	Oxalic acid (*i.e.* ethanedionic acid)				**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, UP. **Japan:** for each category of resins, check the maximum usage level.	0.02	0.02	0.02	0.02	–	–	–		
0000301-02-0	(Z)-9-Octadecenamide, oleamide				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, AS, PA, PET, PC and PVC. **Japan:** for each category of resins, check the maximum usage level.	50	3	50	5	3	2	50		
0000334-48-5	n-Decanoic acid													China and Japan
0000373-49-9	Palmitoleic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China
0000409-21-2	Silicon carbide				**Japan:** for each category of resins, check the maximum usage level.	0.01	–	29.1	–	–	–	–		China
0000461-58-5	Dicyanodiamide	60			**Japan:** for each category of resins, check the maximum usage level.	1	–	5	–	–	–	–		China
0000506-30-9	Arachidic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China
0000532-32-1	Sodium benzoate				**China:** Only to be used for the manufacture of PP and PS. **Japan:** for each category of resins, check the maximum usage level.	5	1	1	3	1	1	0.1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000544-63-8	Myristic acid				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000553-54-8	Lithium benzoate	0.6 (expressed as lithium)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS and PET. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.4	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000553-70-8	Magnesium benzoate				**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w. The usage temperature shall be lower than 130ºC. The time contacting food shall not exceed 1 year. **Japan:** for each category of resins, check the maximum usage level.	5	1	1	3	1	1	0.1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000557-04-0	Magnesium stearate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000557-05-1 / 0091051-01-3	Zinc stearate	EU: 5 (expressed as zinc); China: 25 (expressed as zinc)			**China:** Only to be used for the manufacture of PE, PP, PS, AS, PA, ABS, PET, PVDC, PC, PVDC, UP, PEI, PPE and PBT at a maximum level of 3 % w/w; EVA at a maximum level of 6 % w/w; and PMP at a maximum level of 0.04 % w/w. **Japan:** for each category of resins, check the maximum usage level.	15	15	15	15	15	15	15	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000557-09-5	Zinc caprylate	China: 5 (expressed as zinc)			**China:** Only to be used for the manufacture of EVOH. **Japan:** for each category of resins, check the maximum usage level.	15	15	15	15	15	15	15		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000557-59-5	Lignoceric acid				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
0000584-09-8	Carbonic acid, rubidium salt; Rubidium carbonate	12			**China:** Only to be used for the manufacture of PE, PP, PS, PVC, PA, PC, ABS, AS and PET.									Japan
0000611-99-4	4,4'-Dihydroxybenzophenone		8	6 (expressed as the sum of the substances)										China and Japan
0000620-67-7	Glycerol triheptanoate													China and Japan
0000624-03-3	Ethylene glycol dipalmitate		2	30 (expressed as ethyleneglycol)	**Japan:** for each category of resins, check the maximum usage level.	–	2	2	2	2	2	2	Only to be used when produced from a fatty acid precursor that is obtained from edible fats or oils.	China
0000676-46-0	DL-disodium malate				**EU (for malic acid):** In case of use as a monomer only to be used as a co-monomer in aliphatic polyesters up to maximum level of 1 % on a molar basis.								**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
0000693-36-7	Thiodipropionic acid, dioctadecyl ester		14	5 (expressed as the sum of the substances and their oxidation products)	**Japan:** for each category of resins, check the maximum usage level.	5	5	10	30	5	5	5		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0000822-16-2	Sodium stearate				**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC, UP, PBT, PEI and PPE. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0000843-05-6	2-Hydroxy-4-(octyloxy) benzophenone		8	6 (expressed as the sum of substances)	**China:** Only to be used for the manufacture of PE, PP, AS, ABS and PET at a maximum level of 0.5 % w/w; and PC at a maximum level of 3.8 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	0.5	1	0.5	0.5	0.5	0.5		
0000867-13-0	Triethyl phosphonoacetate				**EU:** Only for use in PET. **Japan:** for each category of resins, check the maximum usage level.	0.14	–	0.07	–	–	–	0.07		China
0000872-50-4	N-methylpyrrolidone	60			**Japan:** for each category of resins, check the maximum usage level.	5	5	5	–	–	–	–		China
0000948-65-2	2-Phenyl-1H-indole	15			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS and PET. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	1	–	–	–		
0000991-84-4	2,4-Bis(octylmercapto)-6-(4-hydroxy-3,5-di-tert-butylanilino)- 1,3,5-triazine	30			**China:** Only to be used for the manufacture of PP at a maximum level of 0.3 % w/w; PS and ABS at a maximum level of 0.5 % w/w; and AS at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	1	0.05	0.3	0.05		
0001034-01-1	Gallic acid, octyl ester		20	30 (expressed as the sum of the substances)	**Japan:** for each category of resins, check the maximum usage level.	1.6	0.001	0.001	5	0.001	–	–		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001166-52-5	Gallic acid, dodecyl ester		20	30 (expressed as the sum of the substances)	**Japan:** for each category of resins, check the maximum usage level.	1.6	0.001	0.001	5	0.001	–	–		China
0001241-94-7	Phosphoric acid 2-ethylhexyl diphenyl ester (*i.e.* diphenyl isooctyl phosphate)	2.4			**China:** Only to be used for the manufacture of PVC and PU. **Japan:** for each category of resins, check the maximum usage level.	5	–	5	35	0.05	–	–	**China:** The produced materials or products are only used for contacting non-fatty foods.	
0001302-78-9	Bentonite				**Japan:** for each category of resins, check the maximum usage level.	50	30	35	30	0.5	0.5	0.5	**Japan:** if it is food quality, shall not has any restricctions of % of use	
0001303-96-4	Sodium borate		16	6 (expressed as boron)	**Japan:** for each category of resins, check the maximum usage level.	10	10	10	0.5	5	30	0.01	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0001305-62-0	Calcium hydroxide				**Japan:** for each category of resins, check the maximum usage level.	30	30	30	5	30	30	0.01		China
0001305-78-8	Calcium oxide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001309-42-8	Magnesium hydroxide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, UP; and POM at a maximum level of 0.07 % w/w (The use temperature of POM plastic materials and products added with this substance shall not exceed 121ºC. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	–		
0001309-48-4	Magnesium oxide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC (used appropriately according to the production demand); and PVDC at a maximum level of 0.4 % w/w. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30	**China, for PVCD:** The usage temperature shall not exceed 130ºC. The contact time with food shall not exceed: 1 hour at 121ºC ~ 130ºC; 2h at 25ºC ~ 120ºC and unlimited at 25ºC or below.	
0001309-64-4	Antimony trioxide	0.04 (expressed as antimony)			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 0.02 % w/w. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30	**EU:** Migration limit might be exceeded at very high temperature.	
0001310-58-3	Potassium hydroxide				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	5	10	10	5	10	10	5		
0001310-73-2	Sodium hydroxide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	5	10	10	10		

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CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001314-13-2	C.I. Pigment White 4; zinc oxide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PEI, PPE, PBT. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	5	30	30	30	**China:** Shall comply with the purity requirements of colorant.[472]	
0001314-98-3	Zinc sulphide	EU: 5 (expressed as zinc); China: 25 (expressed as zinc)			**China:** Only to be used for the manufacture of PE, PP, PS, PC, PET, PEI, PPE, PBT at a maximum level of 10 % w/w; AS and ABS at a maximum level of 1 % w/w; and PA at a maximum level of 15 % w/w. **Japan:** for each category of resins, check the maximum usage level.	10	30	10	10	10	10	10		
0001317-33-5	Molybdenum disulphide				**Japan:** for each category of resins, check the maximum usage level.	3	–	–	–	–	–	–		China
0001323-39-3	1,2-Propyleneglycol monostearate				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		China
0001327-39-5	Calcium aluminium silicate				**China:** Only to be used for the manufacture of PP and PE. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		
0001330-43-4	Disodium tetraborate		16	6 (expressed as boron)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	0.5	5	30	0.01		
0001330-80-9	1,2-propyleneglycol monooleate				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		China
0001332-37-2	Ferric oxide (*i.e.* iron oxide)	48 (expressed as iron)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30	**China:** Shall comply with the purity requirements of colorant.[472]	

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472 Colorants shall meet the following purity requirements:
1) The content of metals and metalloids soluble in 0.1M hydrochloric acid, determined as a percentage in relation to the colorant mass shall be: antimony ≤ 0.05 %; arsenic ≤ 0.01 %; barium ≤ 0.01 %; cadmium ≤ 0.01 %; chromium (VI) ≤ 0.1 %; lead ≤ 0.01 %; mercury ≤ 0.005 %; selenium ≤ 0.01 %.
2) The mass fraction of other impurities in relation to the colorant mass shall be: polychlorinated biphenyls ≤ 0.0025 %; primary aromatic amines (expressed as aniline) ≤ 0.05 %, among which the sum of benzidine, b-naphthylamine and 4-aminobiphenyl shall be 0.001 %.

Additives positive list														
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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001332-58-7	Kaolin				**EU:** Particles can be thinner than 100 nm only if incorporated at a quantity of less than 12 % w/w in an ethylene vinyl alcohol copolymer (EVOH) inner layer of a multi-layer structure, in which the layer in direct contact with the food provides a functional barrier preventing migration of particles into the food. **China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	50	40	40	40	40	40	40		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001333-86-4	C.I. Pigment Black 7 (*i.e.* carbon black)				**China:** Only to be used for the manufacture of PMMA, PVC, PVDC, PU, UP, PF, PEI, PPE, PBT, PPS, POM and LC at a maximum level of 2.5 % w/w; PE at a maximum level of 3 % w/w; and PP, PS, AS, ABS, PA, PET and PC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level. Toluene extract shall be 0.1 % or less. Benzo[a]pyrene content shall be 0.25 mg/kg or less.	25	30	35	30	10	10	10	**EU:** Primary particles of 10 - 300 nm which are aggregated to a size of 100 - 1200 nm which may form agglomerates within the size distribution of 300 nm- mm. Toluene extractables: less than 0.1 % determined according to ISO method 6209. UV absorption of cyclohexane extract at 386 nm: < 0.02 AU for a 1 cm cell or < 0.1 AU for a 5 cm cell, determined according to a generally recognised method of analysis. Benzo[a] pyrene content: less than 0.25 mg/kg carbon black. Maximum use level of carbon black in the polymer: 2.5 % w/w. **China:** Toluene extractables: less than 1 %. Benzo[a]pyrene content: less than 0.25 mg/kg. Shall comply with the purity requirements of colorant.[472]	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001335-23-5 / 0007681-65-4	**Copper iodide**	5 (expressed as copper)	6	1 (expressed as iodine)	**China:** Only to be used for the manufacture of PA, PBT and POM.									Japan
0001336-21-6	**Ammonium hydroxide**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, PS, ABS, PET, PC, PVC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	2	5	5	5	1	1	1		
0001338-39-2	**Sorbitan monolaurate**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		
0001338-41-6	**Monooctadecanoate (*i.e.* sorbitan monostearate (Span 60))**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		
0001338-43-8	**Mono-9-octadecenoate, (Z)-sorbitan (*i.e.* sorbitan monostearate (Span 80); or sorbitan monooleate; or monooctadecanoate)**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	5	50	50	5		
0001343-88-0	**Magnesium silicate**				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0001343-98-2	**Silicic acid**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001344-00-9	Sodium aluminium silicate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		
0001344-01-0	Aluminium calcium sodium silicate				**China:** Only to be used for the manufacture of PP and PE. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50		
0001344-09-8	Sodium silicate				**China:** Only to be used for the manufacture of PE, PP, PA and PET. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0001344-28-1	Aluminium oxide (*i.e.* activated alumina)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	Shall comply with the purity requirements of colorant.[472]	
0001344-95-2	Calcium silicate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0001401-55-4	Tannic acids				**EU:** According to the JECFA specifications **Japan:** for each category of resins, check the maximum usage level.	5	5	10	–	–	–	–		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001533-45-5	4,4'- Bis(2-benzoxazolyl) stilbene	0.05			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 0.025 % w/w.								**EU:** There is a risk that the SML or OML could be exceeded in fatty food simulants. **China:** Shall comply with the purity requirements of colorant.[472] 3333-62-8	Japan
0001555-53-9	9-Octadecenoic acid magnesium salt				**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w.								**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
0001592-23-0	Calcium stearate (*i.e.* octadecanoic acid calcium salt)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC at a maximum level of 5 % w/w; PVDC at a maximum level of 5 % w/w; PB-1 at a maximum level of 0.2 % w/w; POM (used appropriately according to the production demand); and PEEK a maximum level of 0.03 %. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0001709-70-2	1,3,5-Trimethyl-2,4,6-tris-(3,5-di-tert-butyl-4-hydroxybenzyl)-benzene				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1.5	1.5	1.5	1	0.5	0.5	0.5		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0001843-03-4	1,1,3-Tris (2-methyl-4-hydroxy-5-tert-butylphenyl)	5			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.2	0.3	0.25	0.25	0.1	0.2	0.05	**China:** Where used for production of materials or products intended to become in contact with fatty and alcoholic foodstuffs, the maximum allowed level shall be 0.1 % w/w.	
0002082-79-3	Octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate (*i.e.* β-(3,5-di-tert-butyl-4-hydroxyphenyl) propionic acid octadecanol ester)	6			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET and PC at a maximum level of 0.5 % w/w; PVC at a maximum level of 0.006 % w/w; PVDC at a maximum level of 0.2 % w/w; PPE, PEI and PBT at a maximum level of 0.25 % w/w; and PB-1 at a maximum level of 0.045 %. **Japan:** for each category of resins, check the maximum usage level.	2.5	6	2.5	2.5	6	2.5	2.5		
0002090-05-3	Calcium benzoate trihydrate				**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	1	1	3	1	1	0.1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0002315-68-6	Benzoic acid, propyl ester													China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0002440-22-4	2-(2-Benzotriazolyl)-4-methylphenol		12	30 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS and PC at a maximum level of 0.5 % w/w; PET at a maximum level of 0.2 % w/w; and PA (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	5	5	10	5	5	5	5		
0002466-09-3	Pyrophosphoric acid				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
0002500-88-1	Dioctadecyl disulphide	0.05			**Japan:** for each category of resins, check the maximum usage level.	–	1	1	–	1	0.5	–		China
0002682-20-4	2-Methyl-4-isothiazolin-3-one	0.5			**EU:** Only to be used in aqueous polymer dispersions and emulsions. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		China
0002725-22-6	2-(4,6-Bis-(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-5-(octyloxy) phenol	China: 0.05 EU: 5			**China:** Only to be used for the manufacture of PE at a maximum level of 0.3 % w/w; and PP at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come into contact with fats and oils or fatty foods. Do not use on parts in contact with food at temperatures above 100°C.	–	0.3	0.3	–	0.3	0.3	–	**China:** The produced materials or products are only used for contacting water-based foods.	
0003061-75-4	Docosanamide (*i.e.* behenamide)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	8	50	6	8	10.5	50		
0003135-18-0	3,5-Di-tert-butyl-4-hydroxybenzylphosphonic acid, dioctadecyl ester													China and Japan

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0003159-62-4	Octadecanoic acid, 12-hydroxy-, calcium salt (2:1)				**China:** Only to be used for the manufacture of POM at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	3	2	2	0.5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0003293-97-8	2-Hydroxy-4-n-hexyloxybenzophenone		8	6 (expressed as the sum of the substances)	**Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	–	–	–	–		China
0003333-62-8	7-(2H-Naphtho[1,2-d] triazol-2-yl)-3-phenyl-2H-1-benzopyran-2-one				**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.02 % w/w; and PET at a maximum level of 0.035 % w/w.								**China:** Shall comply with the purity requirements of colorant.[472]	Japan
0003648-18-8	Di-n-octyltin dilaurate		10	0.006 (expressed as tin)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	1.5	0.2	–	–		
0003724-65-0	2-Butenoic acid (*i.e.* crotonic acid)		35	0.05 (expressed as crotonic acid)										China and Japan
0003825-26-1	Perfluorooctanoic acid, ammonium salt				Only to be used for the manufacture of repeated use articles, sintered at high temperatures									China and Japan
0003864-99-1	2-(5-Chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)-phenol		12	30 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PA, PC and PET. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	0.5	–	–	1		
0003896-11-5	2-(2'-Hydroxy-3'-tert-butyl-5'- methylphenyl)-5-chlorobenzotriazole		12	30 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	1	0.5	0.5	0.5	0.5	0.45		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0004066-02-8	2,2'-Methylenebis(4-methyl-6-cyclohexylphenol)		5	3 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE, PP and PS at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	2	2	0.01	2	2	–		
0004075-81-4	Calcium propionate				**China:** Only to be used for the manufacture of PE. **Japan:** for each category of resins, check the maximum usage level.	0.001	–	–	1	0.001	–	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0004080-31-3 / 0051229-78-7	1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride	0.3			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	0.2	0.2	0.2	–	–	–	–		
0004130-42-1	2,6-Di-tert-butyl-4-ethylphenol	4.8			**China:** Only to be used for the manufacture of EVA (used appropriately according to the production demand); and PE and PP at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come in contact with alcohol.	0.2	0.1	0.1	–	0.1	0.1	–	**EU:** Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.	
0004191-73-5	4-Hydroxybenzoic acid, isopropyl ester													China and Japan
0004221-80-1	3,5-Di-tert-butyl-4-hydroxybenzoic acid, 2,4-di-tert-butylphenyl ester				**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come into contact with fats and oils or fatty foods.	0.2	0.1	0.1	–	0.1	0.1	–		

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Additives positive list															
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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0004485-12-5; 4499-91-6; 20336-96-3; 27253-30-1	Fatty acid (C=8-22), lithium salt				**EU:** see entry "Acids, C2-C24, aliphatic, linear, monocarboxylic, from natural oils and fats, lithium salt". **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	1	1	1	–		China
0004724-48-5	Octylphosphonic acid	0.05			**China:** Only to be used for the manufacture of PE, PP, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come into contact with fats and oils or fatty foods.	–	–	–	–	0.003	0.003	0.003		
0005136-44-7	Ethylene-N-palmitamide-N'-stearamide													China and Japan
0005232-99-5	2-Cyano-3,3-diphenylacrylic acid, ethyl ester	0.05			**China:** Only to be used for the manufacture of PVC at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	3	2	2	0.3	–	–	–		
0005518-18-3	N,N'-ethylenebispalmitamide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	3	50	5	3	2	1.5		
0005743-36-2	Calcium butyrate													China and Japan
0006182-11-2	1,2-Propyleneglycol distearate													China and Japan
0006197-30-4	2-Cyano-3,3-diphenyl-2-propanoic acid 2-ethylhexyl ester	0.05			**China:** Only to be used for the manufacture of PET at a maximum level of 0.5 % w/w; and PVC at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	0.5		
0006200-40-4	Bis(2-hydroxyethyl)-2-hydroxypropyl-3-(dodecyloxy) methylammonium chloride	1.8												China and Japan

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Additives positive list														
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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0006303-21-5	Hypophosphorous acid				**Japan:** for each category of resins, check the maximum usage level.	1.6	1	1	0.2	1	1	0.2		China
0006422-86-2	1,4-Benzenedicarboxylic acid bis(2-ethylhexyl) ester (DOTP) (*i.e.* terephthalic acid, bis(2-ethylhexyl)ester)		32	60 (expressed as the sum of the substances).	**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC and PET (used appropriately according to the production demand); and PVC at a maximum level of 75 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	43	–	–	–		
0006642-31-5	6-Amino-1,3-dimethyl-2,4-pyrimidinedione	5			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS and PET.									Japan
0006683-19-8	Pentaerythritol tetrakis[3-(3,5-di- tert-butyl-4-hydroxyphenyl)- propionate]				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PEI, PPE, PBT, PB-1, PCCD, EVA, PLA and E/NB at a maximum level of 0.5 % w/w; POM at a maximum level of 1 % w/w; and PMP at a maximum level of 0.13 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	50	50	5	50	50	5		
0006700-85-2	Octanoic acid, cobalt salt	0.05 (expressed as cobalt)			**China:** Only to be used for the manufacture of UP at a maximum level of 0.03 % w/w, expressed as cobalt. **Japan:** for each category of resins, check the maximum usage level.	3	–	–	–	–	–	0.05	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0006846-50-0	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (*i.e.* TX-IB)	5			**EU:** Only to be used in single-use gloves. **China:** Only to be used for the manufacture of PVC at a maximum level of 10 % w/w. **Japan:** for each category of resins, check the maximum usage level.	20	–	20	15	–	–	–	**China:** May only be used for production of reusable PVC products (including PVC gloves used for food processing). The usage temperature of the produced materials or products shall not exceed 100ºC.	
0006915-15-7	Malic acid				**EU:** In case of use as a monomer only to be used as a co-monomer in aliphatic polyesters up to maximum level of 1 % on a molar basis. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	1	–	–	–		
0007128-64-5	2,5-Di(5-tert-butylbenzoxazol-2-yl) thiophene	0.6			**China:** Only to be used for the manufacture of PET, PE, PP, AS, ABS at a maximum level of 0.05 % w/w; PC at a maximum level of 0.6 % w/w; PS at a maximum level of 0.02 % w/w; and PVC, PVDC, PEI, PPE, POM, PA, PBT and TPC-ET at a maximum level of 0.015 % w/w. **Japan:** for each category of resins, check the maximum usage level. In the case of synthetic resin category 3, it should not be used in parts that come into contact with alcoholic beverages.	1	1	1	0.05	0.05	0.05	0.03		
0007429-90-5	Aluminium				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVDC, UP, PEI, PPE and PBT. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		

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CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007439-89-6	Iron				**EU:** see entry "Powders, flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron" **China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	9.7899	30	30	30	30	30	8.513		
0007440-31-5	Tin				**EU:** see entry "Powders, flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron". **Japan:** for each category of resins, check the maximum usage level.	5	–	–	–	–	–	–		China
0007440-50-8	Copper				**EU:** see entry "Powders, flakes and fibres of brass, bronze, copper, stainless steel, tin, iron and alloys of copper, tin and iron". **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		China
0007446-70-0	Aluminium chloride				**China:** Only to be used for the manufacture of PE, PS and PP at a maximum level of 0.2 % w/w.								**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
0007447-40-7	Potassium chloride				**Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	–	–	–	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007487-88-9	Magnesium sulphate				**China:** Only to be used for the manufacture of ABS. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007558-80-7	Sodium dihydrogen phosphate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, PA, PET, PC, PVC, PVDC, UP, PEI, PPE and PBT. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007585-39-9	β-Dextrin				**Japan:** for each category of resins, check the maximum usage level.	3	3	3	5	0.01	0.01	0.01		China
0007601-89-0 / 0007791-07-3	Sodium perchlorate	EU: 0.002 China: 0.05			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 1.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	1.2	0.02	–	–	–		
0007620-77-1	Octadecanoic acid, 12-hydroxy-, lithium salt (1:1)				**China:** Maximum allowed level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	1	0.5	0.5	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007631-86-9 / 0112945-52-5 / 0014808-60-7	Silicon dioxide				**EU:** For synthetic amorphous silicon dioxide: primary particles of 1 - 100 nm which are aggregated to a size of 0.1 - 1 µm which may form agglomerates within the size distribution of 0.3 µm to the mm size. **China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50	**China:** The silicon trioxide with CAS No. of 7631-86-9 and 112945-52-5 may be used for all plastics, used appropriately according to the production demand.	
0007631-90-5	Sodium hydrogen sulphite		19	10 (expressed as SO_2)	**Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		China
0007632-00-0	Sodium nitrite	0.6			**China:** Only to be used for the manufacture of PS at a maximum level of 5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	0.1	0.1	0.1	0.1		
0007647-01-0	Hydrochloric acid				**Japan:** for each category of resins, check the maximum usage level.	1	3	3	3	1	1	1		China
0007647-14-5	Sodium chloride				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1.6	0.1	0.1	0.1	10	10	0.005	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007647-15-6	Sodium bromide													China and Japan
0007664-38-2	Phosphoric acid				**China:** Only to be used for the manufacture of PEI, PPE, PBT, PET, PS, AS, PVDC, PVC, PE, PP, PC, ABS and EVOH. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007664-41-7	Ammonia				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	3	1	3	5	1	1	1		
0007664-93-9	Sulphuric acid				**Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		China
0007681-11-0	Potassium iodide		6	1 (expressed as iodine)	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	–	–	1	–	–	–	–		
0007681-53-0	Sodium hypophosphite				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1.6	1	1	0.2	1	1	0.2	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007681-82-5	Sodium iodide		6	1 (expressed as iodine)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP.									Japan
0007704-34-9	Sulphur													China and Japan
0007722-88-5	Tetrasodium pyrophosphate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007727-43-7	C.I. Pigment White 21 (*i.e.* barium sulphate)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011. **China:** Shall comply with the purity requirements of colorant.1	
0007732-18-5	Water				In compliance with Directive 98/ 83/EC.									China and Japan
0007733-02-0	Zinc sulphate				**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	30	–	0.15	–	–	–	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007757-82-6	Sodium sulphate				**China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007757-83-7	Sodium sulphite		19	10 (expressed as SO_2)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, UP. **Japan:** for each category of resins, check the maximum usage level..	30	30	30	30	30	30	30	**Japan:** if it is food quality, shall not has any restricctions of % of use.	

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007758-02-3	Potassium bromide				**Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come into contact with fats and oils or fatty foods.	–	–	0.13	–	–	–	–		China
0007758-11-4	Dipotassium hydrogenphosphate				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007758-16-9	Disodium dihydrogen pyrophosphate (*i.e.* disodium diphosphate)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, UP, PEI, PPE, PBT. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007758-23-8	Calcium dihydrogen phosphate (2:1)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007758-98-7	Copper sulphate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1.6	1	1	0.5	1	1	0.001	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007771-44-0	Arachidonic acid													China and Japan
0007772-98-7	Sodium thiosulphate		19	10 (expressed as SO_2)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	0.005	0.005	0.005	0.005	0.005	0.005	0.005		
0007773-01-5	Manganese chloride	0.6 (expressed as manganese)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1.6	–	0.01	1	0.01	–	–		
0007778-18-9	Calcium sulphate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007778-77-0	Potassium dihydrogen phosphate				**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PC, PVDC and EVOH. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007779-90-0	Zinc phosphate (2:3)				**China:** Only to be used for the manufacture of PE, PP, PS, PC and PET at a maximum level of 50 % w/w. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0007782-42-5	Graphite													China and Japan
0007786-30-3	Magnesium chloride				**China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0007787-70-4	Copper bromide	5 (expressed as copper)			**China:** Only to be used for the manufacture of PE, PP, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	–	–	0.05	–	–	–	–		
0008001-39-6	Japan wax				**Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	2	–	–	–		China
0008001-75-0	Ceresin													China and Japan
0008001-79-4	Castor oil				**China:** Only to be used for the manufacture of PE, PS, AS and ABS.									Japan
0008002-43-5	Lecitin				**Japan:** for each category of resins, check the maximum usage level.	5	10	5	5	10	0.05	10		China
0008002-53-7	Montan wax				**China:** Only to be used for the manufacture of PE and ABS at a maximum level of 3 % w/w; PP at a maximum level of 1 % w/w; and PC at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level. The UV absorbance (maximum absorbance per 1 cm of optical path length) shall be as follows. 280-289 nm 0.15 290-299 nm 0.12 300-359 nm 0.08 360-400 nm 0.02	5	3	5	5	3	10	10		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0008002-74-2	Paraffin waxes and hydrocarbon waxes	EU: 0.05			**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. Paraffin waxes and hydrocarbon waxes shall comply with the following requirements: – average molecular weight not less than 350 Da, viscosity at 100ºC not less than 2.5 cSt (2,5 × 10-6 m^2 /s) and content of hydrocarbons with carbon number less than 25, not more than 40 % w/w; or – average molecular weight not less than 500 Da, viscosity at 100°C not less than 11 cSt (11 × 10-6 m^2/s), content of mineral hydrocarbons with carbon number less than 25, not more than 5 % w/w. **China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC, PVC (used appropriately according to the production demand); PET at a maximum level of 0.25 % w/w; POM at a maximum level of 0.85 % w/w; and PBT at a maximum level of 0.35 % w/w. **Japan:** for each category of resins, check the maximum usage level. The UV absorbance (maximum absorbance per 1 cm of optical path length) shall be as follows. 280-289nm 0.15 290-299nm 0.12 300-359nm 0.08 360-400nm 0.02	50	50	50	10	50	50	50	**EU:** – Waxes, paraffinic, refined, derived from petroleum based or synthetic hydrocarbon feedstocks, low viscosity are approved additives. – Waxes, refined, derived from petroleum based or synthetic hydrocarbon feedstocks, high viscosity.	
0008006-44-8	Candelilla wax				**Japan:** for each category of resins, check the maximum usage level.	5	–	5	3	–	–	0.5		China
0008012-89-3	Beeswax				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	–	–	5		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0008013-07-8	Epoxidized soybean oil		32	30-60(*) (expressed as the sum of the substances).	**China:** Only to be used for the manufacture of PE, PET, PA, PP, PS, AS, ABS, PC, PVC, PVDC, UP, PBT, PEI, PPE. **Japan:** for each category of resins, check the maximum usage level.	50	10	50	50	0.5	1.5	1	**EU:** (*) In the case of PVC gaskets used to seal glass jars containing infant formulae and follow-on formulae as defined by Directive 2006/141/EC or processed cereal-based foods and baby foods for infants and young children as defined by Directive 2006/125/EC, the SML is lowered to 30 mg/kg. Oxirane < 8 %, iodine number. **China:** (*) Food contact materials and articles intended for infants shall not exceed a SML(T) of 30 mg/kg. Oxirane < 8 %, iodine number < 6.	
0008015-86-9	Carnauba wax				**Japan:** for each category of resins, check the maximum usage level.	10	10	20	10	5	5	5		China
0008017-16-1	Polyphosphoric acid				**China:** Only to be used for the manufacture of PET at a maximum level of 0.015 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0008042-47-5	White mineral oil				**China:** Only to be used for the manufacture of LCP at a maximum level of 2 % w/w; and PET, PEI, PPE, PBT, PVC, PE, PP, PS, ABS and PC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level. The UV absorbance (maximum absorbance per 1 cm of optical path length) shall be as follows. 280-289 nm 4.0 290-299 nm 3.3 300-329 nm 2.3 330-350 nm 0.8	50	50	50	5	50	50	50	The average molecular mass is ≥ 480 Da. The dynamic viscosity at 100ºC is ≥ 8.5×10-6m²/s. The substance with carbon atom number of mineral hydrocarbon less than 25 is ≤ 5 % w/w.	
0008050-09-07	Rosin				**China:** Only to be used for the manufacture of PE, PP, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1	50	50	2	50	50	0,03		
0008050-15-5	Rosin, hydrogenated, ester with methanol				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		China
0008050-26-8	Rosin, ester with pentaerythritol				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		China
0008050-31-5	Rosin, ester with glycerol				**Japan:** for each category of resins, check the maximum usage level.	–	35	10	2	35	35	–		China
0008062-15-5	Lignosulphonic acid	0.24			Only to be used as dispersant for plastics dispersions. **China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, UP. **Japan:** for each category of resins, check the maximum usage level.	–	0.003	10	–	0.01	–	–		
0009000-01-5	Arabic gum				**Japan:** for each category of resins, check the maximum usage level.	–	–	0.2	5	0.2	–	–		
0009000-11-7	Carboxymethyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	5	5	15	5	5	5	5		China
0009000-16-2	Dammar				**Japan:** for each category of resins, check the maximum usage level.	–	–	5	15	–	–	–		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0009000-30-0	Guar gum				**Japan:** for each category of resins, check the maximum usage level.	–	–	0.2	0.1	0.2	–	–		
0009000-65-1	Tragacanth gum				**Japan:** for each category of resins, check the maximum usage level.	–	–	0.2	–	0.2	–	–		China
0009000-69-5	Pectins				**Japan:** for each category of resins, check the maximum usage level.	1.6	–	0.01	–	0.01	–	–		
0009000-70-8	Gelatin				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	5	–	–	–		
0009000-71-9	Casein				**Japan:** for each category of resins, check the maximum usage level.	5	5	10	5	5	5	–		China
0009002-88-4	Polyethylene wax				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PC, PVDC; and POM at a maximum level of 0.3 % w/w (The use temperature of POM plastic materials and products added with this substance shall not exceed 121ºC) **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
0009003-07-0	Polypropylene wax				**China:** Only to be used for the manufacture of PE, PS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
0009003-11-6 / 0106392-12-5	**Poly(ethylene propylene) glycol (*i.e.* polymer of epoxy propane and ethylene oxide)**	China: Epoxypropane: nd [or QMA: 1]; Ethylene oxide: nd [or QMA: 1]			**China:** Only to be used for the manufacture of PE, PP, PS and AS at a maximum level of 0.5 % w/w; ABS at a maximum level of 10 % w/w; and PA, PET, PVC and PVDC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	10	50	10	5	5	50		
0009003-39-8	Poly(vinylpyrrolidone)				**EU:** The substance shall meet the purity criteria as laid down in Commission Directive 2008/84/ EC. **Japan:** for each category of resins, check the maximum usage level.	30	30	35	50	30	30	30		China

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Additives positive list															
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						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0009004-34-6	Microcrystallin cellulose (*i.e.* cellulose)				**Japan:** for each category of resins, check the maximum usage level.	40	30	50	30	50	50	30		
0009004-36-8	Cellulose acetate butyrate				**Japan:** for each category of resins, check the maximum usage level.	20	–	–	5	–	–	–		China
0009004-57-3	Ethyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	5	–	–	–		China
0009004-58-4	Ethylhydroxyethylcellulose				**Japan:** for each category of resins, check the maximum usage level.	0.2	0.2	0.2	5	0.2	0.2	0.2		China
0009004-59-5	Methylethylcellulose				**Japan:** for each category of resins, check the maximum usage level.	–	–	50	–	–	–	–		China
0009004-62-0	Hydroxyethylcellulose				**Japan:** for each category of resins, check the maximum usage level.	2	0.1	10	5	–	–	–		China
0009004-64-2	Hydroxypropylcellulose				**Japan:** for each category of resins, check the maximum usage level.	1	–	0.45	5	–	–	–		China
0009004-65-3	Hydroxypropyl methyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	5	3	30	5	3	3	3		
0009004-67-5	Methyl cellulose				**Japan:** for each category of resins, check the maximum usage level.	3	3	4.8	5	3	2.5	3		
0009004-97-1	Polyethyleneglycol monoricinoleate	42			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	0.2	0.2	0.7	5	0.2	0.2	0.2		
0009005-25-8	Edible starch													China and Japan
0009005-27-0	Hydroxyethyl starch				**Japan:** for each category of resins, check the maximum usage level.	–	–	50	–	–	–	–		China
0009005-32-7	Alginic acid				**Japan:** for each category of resins, check the maximum usage level.	1.6	–	30	5	0.01	–	–		China
0009005-37-2	1,2-Propyleneglycol alginate				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	0.5	–	–	–		China
0009005-64-5	Polyethyleneglycol sorbitan monolaurate (*i.e.* polyoxyethylene sorbitan monolaurate (Tween-20))		2	China: 30	**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PET, PC, PA, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	10	10	10	10	10		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0009005-65-6	Polyethyleneglycol sorbitan monooleate (*i.e.* polyoxyethylene sorbitan mono-oleate (Tween-80))		2	China: 30	**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	10	10	10	10	10		
0009005-66-7	Polyethyleneglycol sorbitan monopalmitate													China and Japan
0009005-67-8	Polyethyleneglycol sorbitan monostearate (*i.e.* polyoxyethylene sorbitan monostearate (Tween-60))		2	China: 30	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS at a maximum level of 3 % w/w; PA at a maximum level of 1 % w/w; and PET (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	50	10	10	10	10	10		
0009005-70-3	Polyethyleneglycol sorbitan trioleate (*i.e.* polyoxyethylene sorbitan trioleate (Tween-85))		2	China: 30	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC and PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	50	10	10	10	10	10		
0009005-71-4	Polyethyleneglycol sorbitan tristearate (*i.e.* polyoxyethylene sorbitan tristearate (Tween-65))		2	China: 30	**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	10	10	10	10	10		
0009006-04-6	Rubber, natural				**Japan:** for each category of resins, check the maximum usage level.	15	50	50	50	50	–	–		China
0009009-32-9; 70644-94-9; 87390-32-7	Ester of fatty acid (C=6-22) with glycerol homopolymer (excluding diglycerol)				**EU:** See entry "Acids, aliphatic, monocarboxylic (C6-C22), esters with polyglycerol" **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	30	50	50		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0009010-88-2	Copolymer of methyl methyacrylate and ethyl acrylate		22; 23	China: 6 (expressed as propenoic acid); 6 (expressed as methylpropenoic acid)	**EU:** Only to be used in: rigid PVC at maximum level of 2 % w/w; PLA at a maximum level of 5 % w/w; and PET at amaximum level of 5 % w/w. **China:** Only to be used for the manufacture of PVC at a maximum level of 5 % w/w; and PA, PET and PC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	25	10	20	40	5	5	10		
0009032-42-2	Hydroxyethylmethylcellulose				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	5	–	–	–		China
0009044-17-1	Copolymer of isobutylene and butylene				**China:** Only to be used for the manufacture of PE at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	2	–	–	–		
0009046-01-9	Polyethyleneglycol tridecyl ether phosphate	5			**EU:** Polyethyleneglycol (EO ≤ 11) tridecyl ether phosphate (mono- and dialkyl ester) with a maximum 10 % content of polyethyleneglycol (EO ≤ 11) tridecylether. **China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	3	–	3	1	1	1	1	For materials and articles intended for contact with aqueous foods only.	
0009049-76-7	Hydroxypropyl starch				**Japan:** for each category of resins, check the maximum usage level.	10	10	30	–	10	10	10		
0010016-20-3	α-Cyclodextrin (*i.e.* α-dextrin)				**Japan:** for each category of resins, check the maximum usage level.	3	3	3	5	0.01	0.01	0.01	**China:** in compliance with Table A2 of GB 2760-2015 **Japan:** if it is food quality, shall not has any restricctions of % of use	
0010022-31-8	Barium nitrate													China and Japan

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0010039-33-5	Di-n-octyltin bis(2-ethylhexyl maleate)		10	0.006 (expressed as tin)										China and Japan
0010043-11-5	Boron nitride		16	6 (expressed as boron, without prejudice to the provisions of Directive 98/83/EC)	**Japan:** for each category of resins, check the maximum usage level.	5	2	2	2	2	2	2		China
0010043-35-3	Boric acid		16	6 (expressed as boron)	**China:** Only to be used for the manufacture of PE (used appropriately according to the production demand); and EVOH at a maximum level of 0.16 % w/w. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	0.5	5	30	0.01		
0010043-52-4	Calcium chloride				**China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	1	10	10	10	1	1	0.5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0010043-84-2	Manganese hypophosphite													China and Japan
0010094-45-8	N-Octodecyl-13-docosanamide (*i.e.* octadecylerucamide)	5			**China:** Only to be used for the manufacture of PE, PP, PS, ABS, PA, AS, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	2	2	0.5	0.5	0.5	0.5	0.05		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0010124-49-9	Sulphuric acid, iron salt	48 (expressed as iron)			**China:** Only to be used for the manufacture of PP, PE, PS and ABS. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0010377-51-2	Lithium iodide		6	1 (expressed as iodine)										China and Japan
0010436-08-5	*cis*-11-Eicosenamide													China and Japan
0010605-09-1	Ascorbyl stearate				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		China
0011097-59-9 / 0012304-65-3	Aluminium magnesium carbonate hydroxide				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVCD, UP, EVOH; and POM at a maximum level of 0.02 % w/w (The use temperature of POM plastic materials and products added with this substance shall not exceed 121ºC). **Japan:** for each category of resins, check the maximum usage level.	2.5	1	5	5	5	1	1		
0011104-61-3	Cobalt oxide	0.05 (expressed as cobalt)			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		
0011129-60-5	Manganese oxide	0.6 (expressed as manganese)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	40	40	40	30	30	30	30		
0011138-66-2	Xanthan gum				**Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0012001-26-2	Mica				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 3 % w/w; and PEI, PPE and PBT at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50	**China:** Shall comply with the purity requirements of colorant. [472]	
0012004-14-7 / 0037293-22-4	Calcium sulphoaluminate				**Japan:** for each category of resins, check the maximum usage level.	0.01	–	–	–	–	–	–		China
0012007-55-5	Barium tetraborate		16	6 (expressed as boron, without prejudice to the provisions of Directive 98/83/EC)										China and Japan
0012072-90-1	Hydromagnesite				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		China
0012124-97-9	Ammonium bromide													China and Japan
0012158-74-6	Copper hydroxide phosphate	5 (as copper)			**China:** Maximum allowed level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level. It should not be used in the parts that come into contact with the powdered milk powder or the liquid milk formula specified in Article 2 of the Ministerial Ordinance on the component specifications of milk and dairy products.	2.6	2.6	2.6	2.6	2.6	2.6	2.6	**China:** The usage temperature shall be lower than 100ºC.	
0012198-93-5	Ozokerite													China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0012251-44-4	Potassium aluminum silicate				**China:** Only to be used for the manufacture of PP and PE. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	50	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0012269-78-2	Pyrophyllite				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
0012304-65-3	Hydrotalcite				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2.4552	1	5	5	5	1	1		
0012626-88-9	Manganese hydroxide													China and Japan
0012627-14-4	Lithium silicate				**China:** Only to be used for the manufacture of PE, PP, AS, PS and ABS. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0012751-22-3	Iron phosphide				Only to be used for the manufacture of PET polymers and copolymers.									China and Japan
0013003-12-8	4,4'-Butylidene-bis(6-tert-butyl-3- methylphenyl-ditridecyl phosphite)	6			**China:** Only to be used for the manufacture of PP, PE, PS, ABS and PVC at a maximum level of 0.5 % w/w; and PC (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	1.5	2	1.5	0.5	0.5	0.5	–		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0013040-19-2	Zinc ricinoleic acid	42 (expressed as ricinoleic acid)			**China:** Only to be used for the manufacture of PVC at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	15	15	15	15	15	15	15	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0013252-13-6	Perfluoro[2-(n-propoxy) propanoic acid]				Only to be used in the polymerisation of fluoropolymers that are processed at temperatures at or above 265°C and are intended for use in repeated use articles.									China and Japan
0013445-56-2	Pyrophosphorous acid													China and Japan
0013463-67-7 / 0001317-80-2	C.I. Pigment White 6 (*i.e.* titanium dioxide)				**Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	**China:** Shall comply with the purity requirements of colorant.[472]	
0013560-49-1	3-Aminocrotonic acid, diester with thiobis (2-hydroxyethyl) ether				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	3	–	–	–		China
0013586-84-0	Cobalt stearate (*i.e.* octadecanoic acid cobalt salt)	0.05 (expressed as cobalt)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC, UP and EVOH. **Japan:** for each category of resins, check the maximum usage level.	–	1	1	–	1	–	0.18	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0013598-37-3	Zinc dihydrogen phosphate (2:1)				**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PET, PC, PA, PEI, PPE and PBT. **Japan:** for each category of resins, check the maximum usage level.	10	5	5	5	5	5	5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0013983-17-0	Wollastonite				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	10		
0014464-46-1	Cristobalite				**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PA, PET and PA. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		
0014807-96-6	Talcum powder				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PEI, PPE, PBT, POM, TPC-ET and PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
0014808-60-7	Quartz				**Japan:** for each category of resins, check the maximum usage level.	40	30	30	30	30	30	30		China
0015535-79-2	Dioctyltin thioglycolate (*i.e.* di-n-octyltin mercaptoacetate)		10	0.006 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 1.3 % w/w.									Japan
0015571-58-1	Di-n-octyltin bis(2-ethylhexyl mercaptoacetate) (*i.e.* 2-ethylhexyl-10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate)		10	0.006 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 3 % w/w; and PE, PP, PS, AS, ABS, PA, PET, PC, PVDC and UP at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	2	2	5	2	2	–		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0015571-60-5	Di-n-octyltin dimaleate		10	0.006 (expressed as tin)	**Japan:** for each category of resins, check the maximum usage level.	1	–	–	5	–	–	–		China
0016260-09-6	Oleyl palmitylamide	5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.7 % w/w; and PE, PS and ABS (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	50	50	0.5	50	0.05	–		
0016389-88-1	Dolomite				**Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		China
0016545-54-3	Thiodipropionic acid, ditetradecyl ester		14	5 (expressed as the sum of the substances and their oxidation products)	**Japan:** for each category of resins, check the maximum usage level.	5	5	10	30	5	5	5		China
0017194-00-2	Barium hydroxide													China and Japan
0018600-59-4	2,2-(1,4-Phenylene)bis((4H-3,1-benzoxazine-4-one)	0.05			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	1	**EU:** SML including the sum of its hydrolysis products	
0018641-57-1	Glycerol tribehenate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		China
0019569-21-2	Huntite				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0020336-96-3	**Tetradecanoic acid, lithium salt (*i.e.* myristic acid, lithium salt)**	0.6 (expressed as lithium)			**China:** Only to be used for the manufacture of PP at a maximum level of 0.15 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	1	1	1	–	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0020427-58-1	**Zinc hydroxide**	EU: 5 (expressed as zinc) China: 25 (expressed as zinc)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	0.005	3	0.005	0.005	2	2	0.005		
0021645-51-2	**Aluminum hydroxide**				**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC, PET, PVC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	30	50	30	30	30	30	**China:** Shall comply with the purity requirements of colorant.[472]	
0022677-47-0	**Magnesium ricinoleic acid**	42 (expressed as ricinoleic acid)			**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	10	3	0.5	0.5	0.5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0022788-19-8	**1,2-Propyleneglycol dilaurate**													China and Japan
0023128-74-7	**1,6-Hexamethylene-bis(3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionamide)**	45			**China:** Only to be used for the manufacture of PE, PC and PA at a maximum level of 1 % w/w; PET at a maximum level of 0.6 % w/w. **Japan:** for each category of resins, check the maximum usage level. For resin category 5 should not be used in the parts that come into contact with fats and oils and fatty foods at temperatures above 100°C.	1	1	1	1	1	–	0.6		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0023676-09-7	4-Ethoxybenzoic acid, ethyl ester	3.6												China and Japan
0023949-66-8	2-Ethoxy-2'-ethyloxanilide (*i.e.* N-(2-ethoxyphenyl)-N'-(2-ethylphenyl)-ethanediamide)	30			**China:** Only to be used for the manufacture of PVC at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	–	0.5	1	–	–	–		
0024937-78-8	Polymer of vinyl acetate and ethylene (*i.e.* ethylene-vinyl acetate copolymer wax)	China: Vinyl acetate:12 or 5 (*)			**EU:** Only to be used as a polymeric additive up to 2 % w/w in polyolefins. **China:** Only to be used for the manufacture of PE, PP. **Japan:** for each category of resins, check the maximum usage level.	20	20	20	2.3	20	2.3	2.3	(*) The migration of low molecular weight oligomeric fraction below 1000 Da shall not exceed 5 mg/ kg food.	
0025013-16-5	(1, 1-Dimethylethylmethoxy phenol)-4-methoxyphenol (*i.e.* butylated hydroxyanisole (BHA))	30			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1.6	–	0.05	0.5	–	–	0.05		
0025101-28-4	(Butadiene, styrene, methyl methacrylate, butyl acrylate) copolymer cross-linked with divinylbenzene or 1,3-butanediol dimethacrylate				Only to be used in: – rigid poly(vinyl chloride) (PVC) at a maximum level of 12 % at room temperature or below; or – at up to 40 % w/w in blends of styrene acrylonitrile copolymer (SAN)/ poly(methyl methacrylate) (PMMA) repeat- use articles at room temperature or below, and when either in contact only with aqueous, acidic and/or low alcoholic (< 20 %) foodstuffs for less than 1 day, or when in contact only with dry foodstuffs for any duration of time.									China and Japan
0025134-51-4	2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate	2-Ethynilhexyl ester: 0.05	22	6 (expressed as acrylic acid)										China and Japan

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0025151-96-6	Pentaerythritol dioleate	0.05			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS and PET. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	10	50	50	50	Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down.	
0025155-30-0	Sodium dodecyl benzene sulphonate	30 (as dodecylbenzenesulphonic acid)			**China:** Only to be used for the manufacture of PE, PP, PS, AS and PC at a maximum level of 0.2 % w/w; ABS at a maximum level of 2.5 % w/w; PA at a maximum level of 3 % w/w; and PET at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	3	50	3	3	3	3	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0025322-68-3	Polyethylene glycol		2	China: 30	**China:** Only to be used for the manufacture of PE, PP at a maximum level of 3 % w/w; PS, AS and ABS at a maximum level of 0.3; PA, PET, POM and PBT (used appropriately according to the production demand); and PC at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	10	10	5	5	5	5		
0025322-69-4	Polypropylene glycol				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS at a maximum level of 5 % w/w; and PA and PET (used appropriately according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	5	50	5	5	5	50		
0025322-99-0	(Butyl acrylate, methyl methacrylate, butyl methacrylate) copolymer				**EU:** Only to be used for the manufacture of rigid PVC at a maximum level of 1 % w/w; and PLA at a maximum level of 5 % w/w. **China:** Only to be used for the manufacture of ABS, AS, PA, PC, PE, PET, PP, PS, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	25	10	20	40	5	5	10		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0025359-91-5	**Formaldehyde copolymer with 1-naphthalenol**	Formaldehyde copolymer with 1-naphthalenol: 0.05	15	China: 15	**China:** Only to be used for the manufacture of PVC.									Japan
0025583-20-4	**Titanium nitride**				**EU:** No migration of titanium nitride nanoparticles. Only to be used for the manufacture of polyethylene terephthalate (PET) up to 20 mg/ kg. In the PET, the agglomerates have a diameter of 100-500 nm consisting of primary titanium nitride nanoparticles; primary particles have a diameter of approximately 20 nm. **China:** Only to be used for the manufacture of PET at a maximum level of 0.002 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	0.5	–	0.002	**China:** The usage temperature of PET finished product containing titanium nitride shall not be higher than 100°C.	
0025618-55-7	**Polyglycerol**				**EU:** To be processed under conditions preventing the decomposition of the substance and up to a maximum temperature of 275°C. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	1	1	1	1		China
0025736-61-2	**Maleic anhydride-styrene, copolymer, sodium salt**				**EU:** The fraction with molecular weight below 1000 Da shall not exceed 0.05 % w/w. **Japan:** for each category of resins, check the maximum usage level. It can be used at 4.3 % or less only in parts that do not come into contact with food (excluding synthetic resin categories 4, 5 and 6).	1	3	3	3	–	–	1		China
0026266-57-9	**Sorbitan monopalmitate (Span 40)**				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		
0026266-58-0	**Sorbitan trioleate (*i.e.* tris-9-octadecenoate, (Z, Z, Z)-D-Glucitol)**				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	5	50	50	5		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0026401-86-5	Monooctyltin tris(isooctylthioglycollate); mono-n-octyltin tris(isooctyl mercaptoacetate)		11	1.2 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	3	–	–	3	–	–	–		
0026401-97-8	2,2'-((Dioctylstannylene) bis(thio)) bis-acetic acidiisooctyl ester (*i.e.* di-n-octyltin bis(isooctyl mercaptoacetate))		10	0.006 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 3 % w/w; and PE, PP, PS, AS, ABS, PA, PET, PC, PVDC and UP at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	2	2	5	2	2	–		
0026402-23-3	Glycerol monohexanoate				**Japan:** for each category of resins, check the maximum usage level. Allowed additive "ester of fatty acid (C=2-24) with glycerol or diglycerol"	50	50	50	30	10	50	50		China
0026402-26-6	Glycerol monooctanoate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		China
0026427-07-6	Dibutylthiostannoic acid polymer				Molecular unit = $(C_8H_{18}S_3Sn)_n$ (n = 1,5-2).									China and Japan
0026636-01-1	2,2'-[(Dimethylstannylene) bis(thio)]bi-acetic acidiisooctyl ester (*i.e.* dimethyltin bis(isooctyl mercaptoacetate))		9	0.18 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	2	–	–	–		
0026658-19-5	Sorbitan tristearate (*i.e.* sorbitan, trioctadecanoate)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		
0026741-53-7	3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane (*i.e.* bis(2,4-di-tert-butylphenyl) pentaerythritol diphosphate)	0.6			**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.1 % w/w; PC and ABS at a maximum level of 0.2 % w/w; and PVC at a maximum level of 0.86 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	5	1	1	5	1	1		
0026836-47-5	Sorbitol monostearate													China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0027107-89-7	Octyltin tris(2-ethylhexyl mercaptoacetate) (*i.e.* mono-n-octyltin tris(2-ethylhexyl mercaptoacetate))		11	1.2 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	3	–	–	3	–	–	–		
0027136-15-8	Copolymer of butyl acrylate together with methyl methyacrylate and styrene		22; 23	6 (expressed as propenoic acid); 6 (expressed as methylpropenoic acid)	**EU:** Only to be used for the manufacture of rigid poly(vinyl chloride) (PVC) at a maximum level of 3 % w/w. **China:** Only to be used for the manufacture of ABS, PE, PP, PS, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	–	–	50		
0027176-87-0	Dodecylbenzene sulphonic acid	30			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PC at a maximum level of 0.3 % w/w; and PA and PET (used according to the production demand). **Japan:** for each category of resins, check the maximum usage level.	50	3	50	3	3	3	3		
0027194-74-7	1,2-Propyleneglycol monolaurate				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		China
0027215-38-9	Glycerol monolaurate and lauric acid monoglyceride				**China:** Only to be used for the manufacture of PVC, PE and PP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
0027253-31-2	Cobalt neodecanoate	0.05 (expressed as neodecanoic acid); 0.05 (expressed as cobalt)			**China:** Only to be used for the manufacture of PA and PET at a maximum level of 0.05 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	1	1	–	–	–	1	**China:** The produced materials or products shall not become in contact with non-fatty foodstuffs.	
0027458-90-8	Di-tert-dodecyl disulphide	0.05			**Japan:** for each category of resins, check the maximum usage level. Do not use on parts that come in contact with acidic food or alcohol. Do not use on parts in contact with food at temperatures above 100°C.	0.02	–	0.02	–	–	–	–		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0027676-62-6	1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-s-trizine-2,4,6-(1H,3H,5H)-trione	5			**China:** Only to be used for the manufacture of PP and ABS at a maximum level of 0.25 % w/w; and PE and PET at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	0.5	0.5	–	0.5	0.25	0.5		
0028290-79-1	Linolenic acid				**Japan:** for each category of resins, check the maximum usage level.	–	–	0.03	–	0.03	–	–		China
0028931-67-1	Trimethylolpropane trimethacrylate-methyl methacrylate copolymer				**Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	1	5.2	–		China
0029013-28-3	1,2-Propyleneglycol monopalmitate				**Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		China
0029116-98-1	Sorbitan dioleate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	5	50	50	5		China
0029204-02-2	Gadoleic acid				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5		China
0029894-35-7	Polyglyceryl polyricinoleate				**China:** Only to be used for the manufacture of PVC, PE and PP. **Japan:** for each category of resins, check the maximum usage level.	10	10	10	10	10	10	10		
0030233-64-8	Glycerol monobehenate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
0030899-62-8	Dodecanoic acid, ester with 1,2,3-propanetrioldiacetate (*i.e.* glycerol monolaurate diacetate)		32	60 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
0031566-31-1	Glycerol monostearate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0031570-04-4	**Phosphorous acid, tris(2,4-di-tert- butylphenyl) ester; (*i.e.* tris(2,4-ditert-butylphenyl) phosphite; or antioxidant 168)**				**China:** Only to be used for the manufacture of PB-1 at a maximum level of 0.15 % w/w; PE, PS and EVA at a maximum level of 0.2 % w/w; PP at a maximum level of 0.25 % w/w; PEI and PC at a maximum level of 0.3 % w/w; AS and ABS at a maximum level of 0.4 % w/w; PA at a maximum level of 1 % w/w; PAAM and PMMA at a maximum level of 0.5 % w/w; and PMP at a maximum level of 0.08 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	3	50	12	3	0.6	1.5		
0031831-53-5	**2-Oxepanone, polymer with 1,4-butanediol (*i.e.* polyester of 1,4-butanediol with caprolactone)**		29; 30	0.05 (expressed as 6-hydroxycaproic acid and caprolactone); 5 (expressed as 1,4-butanediol)	**EU:** The fraction with molecular weight below 1000 Da shall not exceed 0.5 % w/w. **China:** Only to be used for the manufacture of PE, PP, PS, ABS, AS, PA, PET, PC and PVC at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.1	0.1	0.1	0.1	0.1	0.1		
0031983-33-2 / 0006865-33-4	**Calcium ricinoleate**	42 (expressed as ricinoleic acid)			**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	10	3	0.5	0.5	0.5	**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	
0032509-66-3	**Ethylene glycol bis[3,3-bis(3-tert- butyl-4-hydroxyphenyl) butyrate]**	6			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level. It shall not be used in parts that come into contact with food at temperatures above 70°C.	0.5	0.5	0.5	–	0.5	0.5	–		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0032647-67-9	Bis-o-(phenylmethylene)-d-glucitol (*i.e.* dibenzylidene sorbitol)				**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	1	1	–	0.7	0.7	–		
0032687-78-8	3-(3,5-Di-tert-butyl-4-hydroxyphenyl)-N'-[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propanoyl] propanehydrazide	15			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.2 % w/w; and AS, ABS and PS at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.1	0.2	0.2	0.2	0.25	0.2	–		
0033568-99-9	Di-n-octyltin bis(isooctyl maleate)		10	0.006 (expressed as tin)										China and Japan
0033587-20-1	1,2-Propyleneglycol dipalmitate													China and Japan
0033940-98-6	Triglyceryl monooleate				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.									Japan
0035074-77-2	1,6-Hexamethylene-bis(3-(3,5-di- tert-butyl-4-hydroxyphenyl)propionate)	6			**Japan:** for each category of resins, check the maximum usage level.	1	–	0.5	–	–	–	–		China
0035958-30-6	1,1-Bis(2-hydroxy-3,5-di-tert- butylphenyl)ethane	5			**China:** Only to be used for the manufacture of PE, PP, PS and PVC at a maximum level of 0.1 % w/w; and ABS at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.1	0.2	0.2	0.2	0.05	0.1	–		
0036443-68-2	Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester; triethyleneglycol bis[3-(3-tert- butyl-4-hydroxy-5-methylphenyl) propionate]	9			**China:** Only to be used for the manufacture of POM Homopolymer at a maximum level of 0.25 % w/w; POM copolymer at a maximum level of 0.7 % w/w; PS, AS and ABS at a maximum level of 0.3 % w/w; PA and PET at a maximum level of 0.5 % w/w; PVC at a maximum level of 0.2 % w/w; and PVDC at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	1	5	1	0.3	0.3	0.5	**China:** The produced materials or products shall not be contacted with the food with ethanol content higher than 15 %.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0037205-99-5	Ethylcarboxymethylcellulose													China and Japan
0037206-01-2	Methylcarboxymethylcellulose													China and Japan
0037244-96-5	Nepheline syenite				**China:** Maximum allowed level of 50 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
0037296-97-2	Silicic acid, magnesium-sodium- fluoride salt	0.15			**EU:** Only to be used in layers of multi-layer materials not coming into direct contact with food. **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30	SML expressed as fluoride.	China
0037353-59-6	Hydroxymethylcellulose													China and Japan
0037486-69-4	2H-Perfluoro-[(5,8,11,14-tetramethyl)-tetraethyleneglycol ethyl propyl ether]				Only to be used as a polymer production aid in the polymerisation of fluoropolymers intended for: (a) repeated and single use materials and articles when sintered or processed (non-sintered) at temperatures at or above 360°C for at least 10 minutes or at higher temperatures for equivalent shorter times; and (b) repeated use materials and articles when processed (non-sintered) at temperatures from 300°C and up to 360°C for at least 10 minutes.										China and Japan
0037953-21-2	(Methyl methacrylate, butyl acrylate, styrene, glycidyl methacrylate) copolymer				**EU:** Only to be used in rigid poly(vinyl chloride) (PVC) at a maximum level of 2 % at room temperature or below. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	–	–	50		China
0038613-77-3	Tetrakis(2,4-di-tert-butyl-phenyl)- 4,4'-biphenylylene diphosphonite	18			**Japan:** for each category of resins, check the maximum usage level.	1	0.7	1	0.2	0.4	0.3	0.2		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0039318-18-8	Tungstene oxide	0.05			**EU:** Stoichiometry: WOn, n = 2,72-2,90 **Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30	When used as reheat agent in polyethylene terephthalate (PET) verification of compliance with the specific migration limit is not required; in all other cases compliance with the specific migration limit shall be verified in accordance with Article 18 of Commission Regulation (EC) No 10/2011; the specific migration limit is expressed as mg tungsten/kg food.	China
0040471-03-2	(Butyl methacrylate, ethyl acrylate, methyl methacrylate) copolymer				Only to be used in rigid poly(vinyl chloride (PVC) at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	25	10	20	40	5	5	10		China
0040601-76-1	1,3,5-tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	6			**China:** Only to be used for the manufacture of PE, PP and PS at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.1	0.1	0.1	0.05	0.1	0.1	0.07		
0041484-35-9	Thiodiethanol bis(3-(3,5-di-tert- butyl-4-hydroxy phenyl) propionate)	2.4			**Japan:** for each category of resins, check the maximum usage level.	0.5	–	0.5	–	0.03	–	–		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0042774-15-2	N,N'-bis(2,2,6,6-tetramethyl-4- piperidinyl) isophthalamide	5			**China:** Only to be used for the manufacture of EVOH and PA at a maximum level of 0.2 % w/w; and PET at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	0.5	–	–	–	0.5	**China:** Materials and products containing this additive must not become in contact with baby foodstuffs and breast milk. EVOH plastic materials and products containing this additive can only be used as an interlayer that does not directly contact foodstuffs. The maximum permitted thickness shall be 12 mm. PA plastic materials and products containing this additive: the maximum permitted thickness shall be 50 mm.	
00050315-14-5	Neodecanoic acid, copper salt				**EU:** see entry "Neodecanoic acid, salts" to check the restrictions. **Japan:** for each category of resins, check the maximum usage level.	3	–	–	–	–	–	–		China
0051798-33-5	Perfluoro[2-(poly(n-propoxy))propanoic acid]				Only to be used in the polymerisation of fluoropolymers that are processed at temperatures at or above 265°C and are intended for use in repeated use articles.									China and Japan
0052047-59-3	2-(4-Dodecylphenyl)indole	0.06												China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0054140-20-4	Sorbitan tripalmitate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		China
0054849-38-6	Monomethyltin tris(isooctyl mercaptoacetate)		9	0.18 (expressed as tin)	**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, UP. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	2	–	–	–		
0057453-97-1	Magnesium neodecanoate				**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w.								**EU:** Authorized substance subjected to the rules set out in Articles 8, 9, 10, 11 and 12 of Commission Regulation (EC) No 10/2011.	Japan
0057569-40-1	Terephthalic acid, diester with 2,2'- methylene bis(4-methyl-6-tert-butylphenol)				**Japan:** for each category of resins, check the maximum usage level.	–	0.075	0.075	–	0.075	0.075	–		China
0057583-34-3	Methyltin tris(isooctyl thioglycollate) (*i.e.* monomethyltin tris(ethylhexyl mercaptoacetate))		9	0.18 (expressed as tin)	**China:** Only to be used for the manufacture of PVC at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	2	–	–	–		
0057583-35-4	Dimethyltin bis(2-ethylhexyl mercaptoacetate) (*i.e.* methyltin mercaptide)		9	0.18 (expressed as tin)	**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	2	–	–	–		
0058128-22-6	Poly(12-hydroxystearic acid) stearate	5			**China:** Maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.1	2	–	0.1	0.2	1		
0058446-52-9	1-Phenyl-3-eicosanedione (*i.e.* stearoylbenzoylmethane)				**China:** Only to be used for the manufacture of PVC at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	1	–	–	–		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0061167-58-6	2-Propenoic acid, 2-(1,1-dimethylethyl)-6-((3-(1,1-dimethylethyl)-2-hydroxy-5-methylphenyl) methyl)-4-methylphenyl ester	6			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level. Synthetic resin categories 5, 6 and 7 shall not be used in parts that come into contact with food at temperatures above 100°C.	0.5	8	0.5	0.5	0.5	0.5	–		
0061269-61-2	N,N'-bis(2,2,6,6-tetramethyl-4- piperidyl) hexamethylenediamine-1,2-dibromoethane, copolymer	2.4												China and Japan
0061752-68-9	Sorbitan tetrastearate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		China
0061788-85-0	Polyethyleneglycol ester of hydrogenated castor oil				**Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	3		China
0061790-53-2	Diatomaceous earth				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	50	50	50	50		
0062568-11-0	Sorbitan, monodocosanoate (*i.e.* (4xi)-1,4-anhydro-5-O-docosanoyl-D-xylo-hexitol)				**China:** Only to be used for the manufacture of PVDC. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	50	50	3		
0063148-62-9 / 0009016-00-6	Polydimethyl siloxane				**China:** Only to be used for the manufacture of POM and PA at a maximum level of 2 % w/w; PE, PP, PS, AS, ABS, PC, PVC and PVDC (used appropriately according to the production demand); and PET at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	15	50	50	7	The molecular weight is not less than 6800. **EU:** Viscosity at 25°C not less than 100 cSt (100 × 10-6 m^2/s)	
0063397-60-4	Bis(2-carbobutoxyethyl) tin- bis(isooctyl mercaptoacetate)	18												China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0063438-80-2	(2-Carbobutoxyethyl) tin- tris(isooctyl mercaptoacetate)	30												China and Japan
0064147-40-6	Castor oil, dehydrated				**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–		China
0064365-11-3	Charcoal, activated				**EU:** Only for use in PET at maximum 10 mg/kg of polymer. Same purity requirements as for Vegetable Carbon (E 153) set out by Commission Regulation (EC) No 231/2012 (4) with exception of ash content which can be up to 10 % w/w. **Japan:** for each category of resins, check the maximum usage level.	3	–	0.001	1	0.001	0.001	0.001		China
0064365-17-9	Rosin, hydrogenated, ester with pentaerythritol				**Japan:** for each category of resins, check the maximum usage level.	30	30	30	10	15	15	–		China
0065140-91-2	3,5-Di-tert-butyl-4-hydroxybenzylphosphonic acid, monoethyl ester, calcium salt	6			**China:** Only to be used for the manufacture of PP at a maximum level of 0.25 % w/w; PE at a maximum level of 0.2 % w/w; and PET at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.2	0.5	0.2	0.2	0.25	0.5		
0065447-77-0 / 0070198-29-7	Dimethylbutanedioate polymerwith 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol	30			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	0.3	1	–	0.3	0.3	–		
0065997-06-0	Rosin, hydrogenated				**Japan:** for each category of resins, check the maximum usage level.	5	50	50	2	50	50	1		
0065997-13-9	Rosin, hydrogenated, ester with glycerol				**Japan:** for each category of resins, check the maximum usage level.	–	25	50	2	25	25	–		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0065997-17-3	Glass wool (*i.e.* glass fibre)				**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PEI, PBT, POM, TPC-ET, LCP and PPS (used appropriately according to the production demand); and PPE at a maximum level of 0.5 % w/w and PTFE at a maximun level of 25 %. **Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	30	40	50	**China:** The temperature of the PTFE plastic materials and articles to which they are added must not exceed 50°C and the contact time shall not exceed 0.5 h. PTFE food contact materials and products containing this additive should not be used in contact with infant formulas and breast milk.	
0066822-60-4	N-Methacryloyloxyethyl-N,N- dimethyl-N-carboxymethylammonium chloride, sodium salt -octadecyl methacrylate-ethyl methacrylate-cyclohexyl methacrylate-N-vinyl-2-pyrrolidone, copolymers				**Japan:** for each category of resins, check the maximum usage level.	3	3	3	3	3	3	–		China
0067649-65-4	Mono-n-dodecyltin tris (isooctyl mercaptoacetate)		25	0.05									SML(T) expressed as the sum of mono-n-dodecyltin tris (isooctyl mercaptoacetate), di-n- dodecyltin bis(isooctyl mercaptoacetate), mono-dodecyltin trichloride and di-dodecyltin dichloride) expressed as the sum of mono- and di-dodecyltin chloride.	China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0067845-93-6	3,5-Di-tert-butyl-4-hydroxybenzoic acid, hexadecyl ester				**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	0.1	–	–	0.5	0.1		
0068412-29-3	Starch, hydrolysed				**Japan:** for each category of resins, check the maximum usage level.	–	–	30	–	–	–	–		China
0068441-17-8	Homopolymer of ethylene oxide (*i.e.* polyethylene waxes, oxidised)	EU: 60 China: Epoxy ethane: nd [or QMA:1]			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PVC, PVDC, PET, PC, POM, PA, PBT, TPC-ET, UP.									Japan
0068442-12-6	9-Octadecenoic acid (Z)-, 2-mercaptoethyl ester, reaction products with dichlorodimethylstannane, sodium sulphide and trichloromethylstannane		9	0.18 (expressed as tin)	**China:** Only to be used for the manufacture of PP, PE, PS, PV, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	–	–	10	2	–	–	–		
0068442-85-3	Cellulose, regenerated				**Japan:** for each category of resins, check the maximum usage level.	40	30	50	30	50	50	30		China
0068476-25-5	Feldspar				**China:** Only to be used for the manufacture of PP and PE.									Japan
0068515-48-0 / 0028553-12-1	Phthalic acid diesters with primary, saturated C8-C10 branched alcohols, more than 60 % C8		26; 32	9 (Group No 26, expressed as the sum of the substances); 60 (Group No 32, expressed as the sum of the substances)	**EU:** Only to be used as a plasticiser in: repeated use materials and articles; in single-use materials and articles contacting non-fatty foods except for infant formulae and follow-on formulae –as defined by Directive 2006/141/EC– or processed cereal-based foods and baby foods for infants and young children –as defined by Directive 2006/125/EC–; and as technical support agent in concentrations up to 0.1 % in the final product. **China:** Only to be used for the manufacture of PVC at a maximum level of 43 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	50	5	5	–	**EU:** If testing in food is performed, Annex V 1.4 of Commission Regulation (EC) No 10/2011 shall be taken into account. **China:** The produced materials or products shall not become in contact with fatty foods, alcoholic foods with ethanol content higher than 20 % and foods for infants.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0068515-49-1 / 0026761-40-0	Phthalic acid, diesters with primary, saturated C9-C11 alcohols more than 90 % C10		26; 32	9 (Group.No. 26, expressed as the sum of the substances); 60 (Group No. 32 expressed as the sum of the substances).	Only to be used as: (a) plasticiser in repeated use materials and articles; (b) plasticiser in single-use materials and articles contacting non-fatty foods, except for infant formulae and follow-on formulae –as defined by Directive 2006/141/EC– or processed cereal-based foods and baby foods for infants and young children –as defined by Directive 2006/125/EC–; and (c) technical support agent in concentrations up to 0.1 % in the final product.								If testing in food is performed, Annex V 1.4 of Commission Regulation (EC) No 10/2011 shall be taken into account.	China and Japan
0068554-70-1	Poly(methylsilsesquioxane)				**China:** Only to be used for the manufacture of PE, PP. **Japan:** for each category of resins, check the maximum usage level.	5	1	2	2	2	2	1	The residues of methyltrimethoxy silane in additives is less than 1mg/kg.	
0068610-51-5	Copolymer of p-cresol together with dicyclopentadiene and isobutylene	5			**China:** Only to be used for the manufacture of PE, PP, PS, AS, PA, ABS, PET, PVC, PC, PVDC and UP. **Japan:** for each category of resins, check the maximum usage level.	0.6	1	1	–	–	–	–		
0068855-54-9	Diatomaceous earth subject to heat treatment by sodium carbonate				**China:** Only to be used for the manufacture of PE, PP. **Japan:** for each category of resins, check the maximum usage level.	50	30	30	30	30	30	30	**China:** Shall comply with the purity requirements of colorant.[472]	
0068951-50-8	Bis(polyethyleneglycol) hydroxymethylphosphonate	0.6												China and Japan
00068953-18-4	Hydrogenated animal oil and fat (excluding "hydrogenated edible oil and fat")				**EU:** see entry "Fats and oils, hydrogenated, from animal or vegetable food sources".	10	10	10	5	10	10	3		China
00068953-55-9	Ester of fatty acid from vegetable oil with glycerol homopolymer (excluding diglycerol)				**EU:** See entry " Acids, aliphatic, monocarboxylic (C6-C22), esters with polyglycerol". **Japan:** for each category of resins, check the maximum usage level.	4	3	3	3	4	4	3		China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0069226-44-4	Di-n-octyltin ethyleneglycol bis(mercaptoacetate)		10	0.006 (expressed as tin)										China and Japan
0070142-34-6	Polyethyleneglycol-30 dipolyhydroxystearate				**Japan:** for each category of resins, check the maximum usage level.	–	0.5	–	–	–	–	–		China
0070321-86-7	2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1 phenylethyl) phenol	1.5			**China:** Only to be used for the manufacture of ABS at a maximum level of 1.2 % w/w; PET at a maximum level of 0.5 % w/w; and PC at a maximum level of 3 % w/w. **Japan:** for each category of resins, check the maximum usage level..	3	1	10	–	–	–	0.5		
0070331-94-1	(1,2-Dioxoethylene) bis(iminoethylene) bis(3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate)				**China:** Only to be used for the manufacture of PP, PE and PS at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	1	1	0.5	0.5	0.5	–		
0071878-19-8	Poly[6-[(1,1,3,3-tetramethylbutyl) amino]-1,3,5-triazine-2,4-diyl]-[(2,2,6,6-tetramethyl-4-piperidyl)-imino]hexamethylene[(2,2,6,6-tetramethyl-4-piperidyl) imino]	3			**Japan:** for each category of resins, check the maximum usage level.	6	0.6	0.6	0.6	0.6	1	3		China
0073018-26-5	Polyester of adipic acid with 1,3- butanediol, 1,2-propanediol and 2-ethyl-1-hexanol		31; 32	30 (Group No. 31expressed as the sum of the substances); 60 (Group No. 32-expressed as the sum of the substances).										China and Japan
0073138-82-6	Resin acids and rosin acids				**Japan:** for each category of resins, check the maximum usage level.	1	50	50	2	50	50	0.03		China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0078301-43-6	Polymer of 2,2,4,4-tetramethyl-7-oxa-3,20-diaza-20-(2,3-epoxypropyl)-dispiro-[5.1.11.2]-heneicosan-21-one	5			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS and PET. **Japan:** for each category of resins, check the maximum usage level.	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
0079072-96-1	Bis (4-Ethylbenzylidene) sorbitol				**China:** Only to be used for the manufacture of PP at a maximum level of 0.7 % w/w; and PE at a maximum level of 0.35 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.7	–		
0080410-33-9	2,2',2'-Nitrilo(triethyl tris(3,3',5,5'-tetra-tert-butyl-1,1'-bi-phenyl-2,2'-diyl) phosphite)	5			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.6	0.3	0.3	–	0.3	0.3	–	SML expressed as sum of phosphite and phosphate	
0080693-00-1	4,8,10-Tetraoxa-3,9-diphosphaspiro [5.5] undecane (*i.e.* bis(2,6-di-tert-butyl-4-methylphenyl) pentaerythritol diphosphite	5			**China:** Only to be used for the manufacture of PE, PP and PS at a maximum level of 0.25 % w/w; ABS, PA and PET at a maximum level of 0.5 % w/w; and PC at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	1	0.5	0.5	0.5	0.5	SML expressed as the sum of phosphate and phosphite.	
0084030-61-5	Di-n-dodecyltin bis(isooctyl mercaptoacetate)		25	0.05	**Japan:** for each category of resins, check the maximum usage level.	–	–	10	–	–	–	–	SML(T) expressed as the sum of mono-n-dodecyltin tris (isooctyl mercaptoacetate), di-n- dodecyltin bis (isooctyl mercaptoacetate), mono-dodecyltin trichloride and di-dodecyltin dichloride) expressed as the sum of mono- and di-dodecyltin chloride.	China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0085209-91-2	2,2'-Methylene bis(4,6-di-tert-butylphenyl) sodium phosphate	5			**China:** Only to be used for the manufacture of PE at a maximum level of 0.3 % w/w; PP at a maximum level of 0.5 % w/w; and PS at a maximum level of 2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	2	2	0.3	0.3	0.5	–		
0085209-93-4	2,2'-Methylene bis(4,6-di-tert-butylphenyl) lithium phosphate	5; and 0.6 (expressed as lithium)			**China:** Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.3	–		
0085711-28-0	Mixture of methyl-branched and linear C14-C18 alkanamides, derived from fatty acids	5			Only to be used in the manufacture of articles made of polyolefins, and which do not come into contact with foods for which food simulant D2 is assigned in Table 2 of Annex III of Commission Regulation (EC) No 10/2011.								Migration of stearamide, listed in Table 1 of Commission Regulation (EC) No 10/2011 under FCM substance No 306 to which no specific migration limit applies, shall be excluded from verification of the compliance of the migration of the mixture with the specific migration limit laid down for the mixture.	China and Japan
0087189-25-1	Poly(zinc glycerolate)													China and Japan
0087826-41-3 / 0069158-41-4 / 0054686-97-4 / 0081541-12-0	Bis(methylbenzylidene)sorbitol				**China:** Only to be used for the manufacture of PP at a maximum level of 0.32 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.8	1	–	0.8	0.8	–		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0090498-90-1	**Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-methyl-, 2,4,8,10-tetraoxaspiro[5.5]undecane-3,9-diylbis(2,2-dimethyl-2,1-ethanediyl) ester**	0.05			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.3 % w/w; ABS and PA at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	5	5	5	5	**EU:** SML expressed as the sum of the substance and its oxidation product 3-[(3-(3-tert-butyl-4-hydroxy-5-methylphenyl) prop-2-enoyloxy)-1,1-dimethylethyl]-9-[(3-(3-tert-butyl-4-hydroxy-5-methylphenyl) propionyloxy)-1,1-dimethylethyl]-2,4,8,10-tetraoxaspiro[5,5]-undecane in equilibrium with its para quinone methid tautomer. There is a risk that the SML or OML could be exceeded in fatty food simulants.	
0090751-07-8 / 0082451-48-7	**Poly(6-morpholino-1,3,5-triazine-2,4-diyl)-[(2,2,6,6-tetramethyl-4-piperidyl) imino)] hexa-methylene-[(2,2,6,6-tetramethyl-4-piperidyl)imino)] (*i.e.* 1,6-Hexanediamine, N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)-, polymer with 2,4-dichloro-6-(4-morpholinyl)-1,3,5-triazine)**	5			**EU:** Average molecular weight not less than 2400 Da. Residual content of morpholine ≤ 30 mg/kg, of N,N'-bis(2,2,6,6- tetramethylpiperidin-4-yl) hexane- 1,6-diamine < 15 000 mg/kg, and of 2,4-dichloro-6-morpholino-1,3,5-triazine ≤ 20 mg/kg. **China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.3 % w/w.								**EU:** There is a risk that the SML could be exceeded from low-density polyethylene (LDPE) containing more than 0.3 % w/w of the substance when in contact with fatty foods.	Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0091082-17-6	Alkyl(C10-C21)sulphonic acid, esters with phenol	0.05			**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	46	–	–	–		China
0092704-41-1 / 0066402-68-4	Calcined kaolin				**Japan:** for each category of resins, check the maximum usage level.	30	30	30	30	30	30	30		
0094469-32-6	Polyoxyalkylene-(C2~C4) dimethyl polysiloxane													China and Japan
0099880-64-5	Glycerol dibehenate				**Japan:** for each category of resins, check the maximum usage level.	50	50	50	30	10	50	50		
0106990-43-6	N,N'"-1,2-Ethanediylbis(N-(3-((4,6-bis(butyl(1,2,2,6,6-pentamethyl-4-piperidinyl) amino)-1,3,5-triazin-2-yl) amino)propyl)-N',N"-dibutyl-N',N"-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)-1,3,5-triazine-2,4,6-triamine	EU: 0.05 China: 0.05; 1,3,5-triazin-2,4,6-triamine: 2.5			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.1 % w/w; and PS, AS and ABS at a maximum level of 0.4 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.4	0.4	0.4	0.1	0.1	0.2	–	Where it is used to produce food contact materials and their products special for infants, the SML of melamine shall be 1mg/kg.	
0110553-27-0	2-Methyl-4,6-2[(octyl and sulphenyl) methyl] phenol		24	5 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE and PP at a maximum level of 5 % w/w; and PS, AS, and ABS at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.2	1	1	1	1	1	–	SML(T) expressed as the sum of substances.	
0110638-71-6	Vermiculite, reaction product with citric acid, lithium salt	0.6 (expressed as lithium)			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET and PC. **Japan:** for each category of resins, check the maximum usage level.	5	5	5	–	5	5	–		
0110675-26-8	2,4-Bis(dodecylthiomethyl)-6-methylphenol		24	5 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PS at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.3	1	1	1	1	1	–		
0118337-09-0	2,2'-Ethylidenebis(4,6-di-tert- butylphenyl) fluorophosphonite	6			**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.3 % w/w.									Japan

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0119345-01-6 / 0038613-77-3	**Reaction product of phosphorus trichloride together with biphenyl and 2,4-di-tert-butylphenol**	18			**China:** Only to be used for the manufacture of PC at a maximum level of 0.15 % w/w; PEI and PBT at a maximum level of 0.3 % w/w; PPE at a maximum level of 0.25 % w/w; PE and PP at a maximum level of 0.1 % w/w; and PS at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	0.7	1	0.2	0.4	0.3	0.2	**EU:** Composition[473]	
0120218-34-0	**Thiodiethanolbis(5-methoxycarbonyl-2,6-dimethyl-1,4-dihydropyridine-3-carboxylate)**	6												China and Japan
0123968-25-2	**2-Propenoic acid, 2-(1-(3,5-bis(1,1-dimethylpropyl)-2-hydroxyphenyl)ethyl)-4,6-bis(1,1-dimethylpropyl) phenyl ester**	5			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.3 % w/w; PS at a maximum level of 1 % w/w; and ABS at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1	1.5	1	0.2	0.3	0.3	–		
0124172-53-8	**N,N'-1,6-hexanediylbis(N-(2,2,6,6-tetramethyl-piperidin-4-yl)formamide**	0.05			**EU:** Limited for ABS with acrylonitrile, content not exceeding 30 % w/w. **China:** Only to be used for the manufacture of PS and ABS at a maximum level of 0.5 % w/w; and PP at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	0.5	0.25	0.5	–	**EU:** There is a risk that the SML or OML could be exceeded in fatty food simulants. There is a risk that the SML could be exceeded from polyolefins.	

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473 EU: Composition: 4,4'-biphenylene-bis[0,0- bis(2,4-di-tert-butylphe nyl)phosphonite] (CAS No 0038613-77-3) (36-46 % w/w (*)); 4,3'-biphenylene-bis[0,0- bis(2,4-di-tert-butylphe nyl)phosphonite] (CAS No 0118421-00-4) (17-23 % w/w (*)); 3,3'-biphenylene-bis[0,0- bis(2,4-di-tert-butylphe nyl)phosphonite] (CAS No 0118421-01-5) (1-5 % w/w (*)); 4-biphenylene-0,0-bis(2,4-di-tert-butylphenyl)phosphonite (CAS No 0091362-37-7) (11-19 % w/w (*)); tris(2,4-di-tert-butylphe nyl)phosphite (CAS No 0031570-04-4) (9-18 % w/w (*)); 4,4'-biphenylene-0,0-bis(2,4- di-tert-butylphenyl)phos phonate-0,0-bis(2,4-di-tert- butylphenyl)phosphonite (CAS No 0112949-97-0) (< 5 % w/w (*)). (*) Quantity of substance used/ quantity of formulation. Other specifications: Phosphor content of min. 5.4 % to max. 5.9 %; acid value of max. 10 mg KOH per gram; melt range of 85–110°C.

Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0124578-12-7	Octadecanoic acid, 12-hydroxy-, homopolymer, reaction products with polyethylenimine				**EU:** Only to be used for the manufacture of plastics up to 0.1 % w/w. Prepared by the reaction of poly(12-hydroxystearic acid) with polyethyleneimine. **China:** Only to be used for the manufacture of PET, PS and PA at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1.5	0.1	1.5	1.5	0.1	0.1	0.1		
0129228-21-3	3,3-Bis(methoxy-methyl)-2,5-dimethylhexane	0.05			**China:** Only to be used for the manufacture of PP at a maximum level of 0.32 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.03	–		
0134701-20-5	2,4-Dimethyl-6-(1-methylpentadecyl)phenol	1			**China:** Only to be used for the manufacture of PS, AS and ABS at a maximum level of 0.5 % w/w; and PVC at a maximum level of 0.033 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
0135861-56-2	Bis(3,4-dimethylbenzylidene) sorbitol				**China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.4 % w/w; and PB-1 at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.4	–		
0136504-96-6	1,2-Bis(3-aminopropyl) ethylenediamine, polymer with N-butyl-2,2,6,6-tetramethyl-4-piperidinamine and 2,4,6-trichloro-1,3,5- triazine	5			**Japan:** for each category of resins, check the maximum usage level.	–	0.3	–	–	0.3	0.3	–		China

Continued on next page

Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0143925-92-2	Bis(hydrogenated tallow alkyl)amines, oxidized				**EU:** Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. Only to be used in: (a) polyolefins at 0.1 % w/w concentration and in (b) PET at 0.25 % w/w concentration. **China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.6	0.05	–	0.6	0.1	–	**EU:** Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.	
0145650-60-8	Phosphorous acid, bis(2,4-di-tert- butyl-6-methylphenyl) ethyl ester	5			**China:** Only to be used for the manufacture of PE at a maximum level of 0.2 % w/w; and PP at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	0.2	1	–	0.2	0.3	–	SML expressed as sum of phosphite and phosphate.	
0146340-15-0	Alcohols, C12-C14 secondary, b-(2-hydroxyethoxy), ethoxylated	5			**Japan:** for each category of resins, check the maximum usage level.	50	50	50	10	50	50	10	There is a risk that the SML could be exceeded from polyolefins.	China
0147315-50-2	2-(4,6-Diphenyl-1,3,5-triazin-2-yl)-5-(hexyloxy)phenol	0.05			**China:** Only to be used for the manufacture of PET and PC at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	–	0.5	–	–	–	0.5		
0151841-65-5	Bis(2,4,8,10-tetra-tert-butyl-6-hydroxy-12H-dibenzo[d,g][1,3,2]dioxaphosphocin-6-oxide) aluminum hydroxide	5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	1.2	1.2	1.2	0.25	0.25	0.25	–		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0152261-33-1	α-alkenes(C20-C24) copolymer with maleic anhydride, reaction product with 4-amino-2,2,6,6-tetramethylpiperidine				Not to be used for articles in contact with fatty foods for which simulant D1 and/or D2 is laid down. Not to be used in contact with alcoholic foods. **China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.5	3	–	0.5	0.5	–	**EU:** Only a method for determination of the content in polymer and a method for determination of the starting substances in food simulants are available.	
0153250-52-3	N,N'-Dicyclohexyl-2,6-naphthalenedicarboxamide	5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.4	–		
0154862-43-8	3,9-Bis(2,4-dicumylphenoxy)-2,4,8,10-tetra-oxa-3,9-diphosphaspiro[5.5] undecane	5			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PVC, PPE, PBT at a maximum level of 0.15 % w/w; PC at a maximum level of 0.2 % w/w; and PEI at a maximum level of 0.3 % w/w. **Japan:** for each category of resins, check the maximum usage level. In the case of Synthetic Resin made of PVC , it should not be used in parts that come into contact with alcoholic beverages, oils and fats, and fatty foods.	0.3	0.2	0.2	0.2	0.2	0.2	0.2	SML expressed as sum of the substance itself, its oxidised form bis (2,4-dicumylphenyl) pentaerythritol phosphate and its hydrolysis product (2,4-dicumylphenol).	
0160535-46-6	1,2,3-Propanetricarboxamide, N,N',N"-tris(2-methylcyclohexyl)-	5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.25	–		
0161717-32-4	2,4,6-Tris(tert-butyl) phenyl-2- butyl-2-ethyl-1,3-propanediol phosphite	2			**China:** Only to be used for the manufacture of PE and PP at a maximum level of 0.2 % w/w.								SML expressed as sum of phosphite, phosphate and the hydrolysis product = TTBP.	Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0166412-78-8	1,2-Cyclohexanedicarboxylic acid, diisononyl ester		32	60 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC, PET and PVC. **Japan:** for each category of resins, check the maximum usage level.	–	–	30	45	–	–	–	SML(T) expressed as the sum of substances.	
0167883-16-1	Polydimethylsiloxane, 3-aminopropyl terminated, polymer with dicyclohexylmethane-4,4'-diisocyanate				**EU:** The fraction with molecular weight below 1000 Da shall not exceed 1.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	3	3	–		China
0171090-93-0	3-(3,5-Di-tert-butyl-4-hydroxyphenyl)propanoic acid, esters with C13-C15 branched and linear alcohols	0.05			**EU:** Only to be used for the manufacture of polyolefins in contact with foods other than fatty/high-alcoholic and dairy products. **Japan:** for each category of resins, check the maximum usage level.	–	0.06	–	–	0.06	0.06	–		China
0174254-23-0	Acrylic acid, methyl ester, telomer with 1-dodecanethiol, C16-C18 alkyl esters.				0.5 % in final product.								Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.	China and Japan
0178671-58-4	Pentaerythritol tetrakis (2-cyano-3,3-diphenylacrylate) (*i.e.* 2-cyano-3,3-diphenyl-2-propenoic acid-2,2-bis (2-cyano-1-oxo-3,3-diphenyl-2-propenyl) oxymethyl-1,3-propilidene ester)	0.05			**China:** Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PEI, PPE and PBT at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level. Do not use on parts in contact with food at temperatures above 70°C.	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
0182121-12-6	9,9-Bis(methoxymethyl) fluorene	0.05			**Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.03	–	There is a risk that the SML or OML could be exceeded in fatty food simulants.	China

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0192268-64-7	1,6-Hexanediamine, N, N-bis(2,2,6,6-tetramethyl-4-piperidinyl)-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products with, N-butyl-1-butanamine and N-butyl-2,2,6,6-tetramethyl-4-piperidinamine	5			**China:** Only to be used for the manufacture of PE at a maximum level of 0.6 % w/w; and PP at a maximum level of 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	2	0.6	0.6	0.6	0.6	1	–		
0203255-81-6	2-Tert-butyl-6-methyl-4-{3-[(2,4,8,10-tetra-tert-butyldibenzo[d,f][1,3,2] dioxaphosphepin-6-yl) oxy]propyl}phenol (*i.e.* 3,3',5,5'-tetrakis(tert-butyl)-2,2'-dihydroxybiphenyl, cyclic ester with [3-(3-tert-butyl-4-hydroxy-5- methylphenyl) propyl]oxyphosphonous acid)	5			**China:** Only to be used for the manufacture of PE at a maximum level of 0.35 % w/w; PP and PS at a maximum level of 0.5 % w/w; and PA at a maximum level of 0.1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.5	0.5	0.5	0.2	0.35	0.5	–	SML expressed as the sum of phosphite and phosphate form of the substance and the hydrolysis products.	
0227099-60-7	1,3,5-Tris(4-benzoylphenyl) benzene	0.05												China and Japan
0263244-54-8	Cyclic oligomers of (butylene terephthalate)				Only to be used for the manufacture of poly(ethylene terephthalate) (PET), poly(butylene terephthalate) (PBT), polycarbonate (PC), polystyrene (PS) and rigid poly(vinyl chloride) (PVC) plastics in concentrations up to 1 % w/w, in contact with aqueous, acidic and alcoholic foods, for long term storage at room temperature.									China and Japan

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0287916-86-3	**Dodecanoic acid, 12-amino-, polymer with ethene, 2,5-furandione, a-hydro-w-hydroxypoly (oxy-1,2-ethanediyl) and 1-propene**				**EU:** Only to be used in polyolefins at levels of up to 20 weight % w/w. These polyolefins shall only be used in contact with foods for which Table 2 of Annex III of Commission Regulation (EC) 10/2011 assigns food simulant E, at ambient temperature or below, and when migration of the total oligomeric fraction of less than 1000 Da does not exceed 50 µg/ kg food. **Japan:** for each category of resins, check the maximum usage level.	–	23	5	–	20	23	–	When a final material or article containing this substance is placed on the market, a well described method to determine whether the oligomer migration complies with the restrictions specified in column 10 of Table 1 Commission Regulation (EC) 10/2011 shall form part of the supporting documentation referred to in Article 16 Commission Regulation (EC) 10/2011. This method shall be suitable for use by a competent authority to verify compliance. If an adequate method is publicly available, reference shall be made to that method. If the method requires a calibration sample, a sufficient sample shall be supplied to the competent authority on its request.	China

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0329238-24-6	Perfluoro acetic acid, a-substituted with the copolymer of perfluoro-1,2-propylene glycol and perfluoro-1,1-ethylene glycol, terminated with chlorohexafluoropropyloxy groups				**EU:** Only to be used in concentrations up to 0.5 % w/w in the polymerisation of fluoropolymers that are processed at temperatures at or above 340ºC and are intended for use in repeated use articles. **Japan:** for each category of resins, check the maximum usage level.	0.5	–	–	–	–	–	–		China
0351870-33-2	(1R, 2R, 3S, 4S)-rel-bicyclo[2.2.1]heptane-2,3-dicarboxylic acid disodium salt (*i.e.* cis-endo-bicyclo(2.2.1)heptane-2,3-dicarboxylic acid, disodium salt)	5			**EU:** Not to be used with PE in contact with acidic foods. Purity ≥ 96 %. **China:** Only to be used for the manufacture of PP and PE at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.25	0.25	–	0.25	0.31	–		
0491589-22-1	Calcium cyclohexane-1,2-dicarboxylate	5			**China:** Only to be used for the manufacture of polyolefin at a maximum level of 0.25 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.25	0.25	–	0.25	0.35	–		
0661476-41-1	Polydimethylsiloxane, 3-aminopropyl terminated, polymer with 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane				**EU:** The fraction with molecular weight below 1000 Da shall not exceed 1 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	3	3	–		China
0736150-63-3	Glycerides, castor-oil mono-, hydrogenated, acetates		32	60 (expressed as the sum of the substances)	**China:** Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC and PET at a maximum level of 3 % w/w; and PVC at a maximum level of 35 % w/w. **Japan:** for each category of resins, check the maximum usage level.	3	3	3	50	3	3	3		
0745070-61-5	1,3,5-Tris (2,2-dimethylpropanamido) benzene	5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.025 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	0.025	–		

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0780763-40-8	**Polyethylene glycol (EO = 1-30, typically 5) ether of butyl 2-cyano 3-(4-hydroxy-3-methoxyphenyl) acrylate**	0.05	2	China: 30	Only for use for the manufacture of PET. **China:** Maximum level of 0.4 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	0.4	**China:** Materials and products may contact aqueous, acidic alcoholic foodstuffs with an ethanol content below 15 % at all temperature conditions. At temperatures below 100ºC, materials and products can also become in contact with fatty and alcoholic foodstuffs with an alcoholic content above 15 %. **Japan:** "ethoxylated (EO≥4) butyl 2-cyano-3-(4-hydroxy-3-methoxyphenyl) acrylate" CAS nº 780763-40-8, are allowed additives.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0852282-89-4	**2-[2,6-Bis(1-methylethyl) phenyl]-6-[4-(1,1,3,3-tetramethylbutyl) phenoxy]-1H-benz[de]isoquinoline-1,3(2H)-dione**	0.05			Only to be used for the manufacture of PET. **China:** maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	–	–	–	–	–	0.5	**EU:** Migration limit might be exceeded at very high temperature. There is a risk that the SML could be exceeded from plastics containing more than 0.5 % w/w of the substance. There is a risk that the SML could be exceeded in contact with foods with high alcoholic content. **China:** Materials and articles containing this additive shall not be used at temperatures above room temperature in contact with fatty foodstuffs. Materials and articles containing this additive shall not be used in contact with alcoholic foods of EtOH higher than 20 %.	
0882073-43-0	**Bis(4-propylbenzylidene) propylsorbitol**	5			**China:** Only to be used for the manufacture of PP at a maximum level of 0.5 % w/w. **Japan:** for each category of resins, check the maximum usage level.	–	0.05	0.05	–	0.05	0.5	–	**EU:** SML including the sum of its hydrolysis products.	

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Additives positive list														
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0908020-52-0	**Perfluoro[(2-ethyloxy-ethoxy)acetic acid], ammonium salt**				Only to be used in the polymerisation of fluoropolymers that are processed at temperatures higher than 300°C for at least 10 minutes.									China and Japan
0939402-02-5	**Phosphorous acid, mixed 2,4- bis(1,1-dimethylpropyl)phenyl and 4-(1,1-dimethylpropyl)phenyl triesters**	EU: 10; China: 5			**China:** Only to be used for the manufacture of PE at a maximum level of 0.2 % w/w. **Japan:** for each category of resins, check the maximum usage level.	0.06	1	0.2	1	0.2	–	–	**EU:** SML expressed as the sum of the phosphite and phosphate forms of the substance, 4-tert-amylphenol and 2,4-di-tert-amylphenol. The migration of 2,4-di-tert-amylphenol shall not exceed 1 **China:** PE food contact materials and products containing this additive should not be used in contact with infant formulas and breast milk. Maximum exposure to fatty foods shall not exceed 0.15 % when in contact with fatty foods over 100°C. For contact with fatty foods, the fat transfer factor (FRF) is suitable for the correction of migration test results. mg/kg food.	

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Additives positive list															
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Restriction of use for each resin category (%)[471]							Notes on verification of compliance	Markets with usage ban
						Cat. 1	Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 7		
0958445-44-8	3H-Perfluoro-3-[(3-methoxy-propoxy)propanoic acid], ammonium salt				Only to be used in the polymerisation of fluoropolymers when: processed at temperatures higher than 280°C for at least 10 minutes; processed at temperatures higher than 190°C up to 30 % w/w for use in blends with polyoxymethylene polymers and intended for repeated use articles.									China and Japan
1010121-89-7	Poly(3-nonyl-1,1-dioxo-1-thiopropane-1,3-diyl)-block-poly(x-oleyl-7-hydroxy-1,5-diiminooctane-1,8-diyl), process mixture with x = 1 and/or 5, neutralised with dodecylbenzenesulphonic acid				Only to be used as polymer production aid in polyethylene (PE), polypropylene (PP) and polystyrene (PS).									China and Japan
1190931-27-1	Perfluoro{acetic acid, 2-[(5-methoxy-1,3-dioxolan-4-yl) oxy]}, ammonium salt				Only to be used as a polymer production aid during the manufacture of fluoropolymers under high temperature conditions of at least 370°C.									China and Japan
1227937-46-3	Phosphorous acid, triphenyl ester, polymer with alpha-hydro-omegahydroxypoly[oxy(methyl-1,2- ethanediyl)], C10-16 alkyl ester	0.05											**EU:** Only to be used as an additive at up to 0,2 % w/w in high impact polystyrene materials and articles intended contact with food at room temperature and below, including hot-fill and/or heating up to 100ºC for up to 2 hours. It shall not be used in contact with foods for which simulant C and/or D1 is assigned in Annex III.	China and Japan

d) Colorant positive list

Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000081-33-4	C.I. Pigment Violet 29 (*i.e.* Anthra-[2,1,9-def; 6,5,10-d'e'f']-diisoquinoline-1,3,8,10-(2H,9H)-tetrone)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVD and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0000081-39-0	C.I.Solvent Red 52 (*i.e.* 3-methyl-6-[(4-methylphenyl)amino]-3H-naphtho-[1,2,3-de]-quinoline-2, 7-dione)				Only to be used for the manufacture of PC, PBT and ABS at a maximum level of 0.05 % w/w; PPE at a maximum level of 0.01 % w/w; PET at a maximum level of 0.2 % w/w; and PEI at a maximum level of 0.3 % w/w.	Shall comply with the colorant purity requirements.[474]
0000081-48-1	C.I. Solvent Violet 13 (*i.e.* 1-hydroxy-4-(p-toluidino) anthraquinone)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP (used appropriately according to the production demand); PEI at a maximum level of 0.12 % w/w; and PPE at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0000081-77-6	C.I. Pigment Blue 60	5 (expressed as copper)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0000082-16-6	C.I. Solvent Violet 36 (*i.e.* 1,8-bis-[(4-methylphenyl)amino] anthracene-9,10-dione)				Only to be used for the manufacture of PET and PC at a maximum level of 0.2 % w/w; PVC at a maximum level of 0.02 % w/w; AS at a maximum level of 0.0005 %.	Shall comply with the colorant purity requirements.[474] Usage maximum temperature of PC materials and products: 121ºC. Usage maximum temperature of AS materials and products: 100ºC.

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474 Colorants shall meet the following purity requirements:

1) The content of metals and metalloids soluble in 0.1M hydrochloric acid, determined as a percentage in relation to the colorant mass shall be: antimony ≤ 0.05 %; arsenic ≤ 0.01 %; barium ≤ 0.01 %; cadmium ≤ 0.01 %; chromium (VI) ≤ 0.1 %; lead ≤ 0.01 %; mercury ≤ 0.005 %; selenium ≤ 0.01 %.
2) The mass fraction of other impurities in relation to the colorant mass shall be: polychlorinated biphenyls ≤ 0.0025 %; primary aromatic amines (expressed as aniline) ≤ 0.05 %, among which the sum of benzidine, β-naphthylamine and 4-aminobiphenyl shall be ≤ 0.001 %.

Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0000082-38-2	**C.I. Solvent Red 111 (*i.e.* 1-(Methylamino) anthraquinone)**				Only to be used for the manufacture of PS, AS, ABS, PA, PET and PC at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0000116-75-6	**C.I. Solvent Blue 104 (*i.e.* 1,4-bis-[(2,4,6-trimethylphenyl)amino]-anthracene-9,10-dione)**				Only to be used for the manufacture of PPE, PS, AS, ABS, PET, PA and PC at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0000128-80-3	**C.I. Solvent Green 3 (*i.e.* 1,4-bis(p-tolylamino) anthraquinone)**				Only to be used for the manufacture of PPE, PET, PS, AS, ABS, PA and PC at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0000147-14-8	**C.I. Pigment Blue 15: phthalocyanine blue (*i.e.* copper phthalocyanine)**	5 (expressed as copper)			Only to be used for the manufacture of PE, PP, PS, PC, PA, PET, AS, ABS, PVC, PVDC, UP, PEI, PP and PBT (used appropriately according to the production demand); and PBT, PMMA, POM, PU, PPS and PEI at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0000574-93-6	**C.I. Pigment Blue 16 (*i.e.* phthalocyanine)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS and PET at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements. [474]
0000980-26-7	**C.I. Pigment Red 122 (*i.e.* 5,12-dihydro-2,9-dimethylquino(2,3-b)-acridine-7,14-dione)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, UP, PBT, PMMA, POM, PU, PPS, PESU, PEI and epoxy resin at a maximum level of 0.5 % w/w.	Shall comply with the colorant purity requirements.[474]
0001047-16-1	**C.I. Pigment Violet 19 (*i.e.* 5,12-dihydro-quino[2,3-b]acridi-ne-7,14-dione)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, UP, PBT, PMMA and POM.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0001308-38-9	**C.I. Pigment Green 17 (*i.e.* chromic oxide)**	nd [expressed as Cr (VI)]			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 3 % w/w.	Shall comply with the colorant purity requirements.[474]
0001309-37-1	**C.I. Pigment Red 101 (*i.e.* ferric oxide or iron (III) oxide (Fe_2O_3))**	48 (expressed as iron)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, PBT, PEI and PPE at a maximum level of 3 % w/w; PCT at a maximum level of 0.3 % w/w.	Shall comply with the colorant purity requirements.[474]
0001314-13-2	**C.I. Pigment White 4 (*i.e.* zinc oxide)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PEI, PPE, PBT.	Shall comply with the colorant purity requirements.[474]
0001317-61-9	**Ferrous ferric oxide (*i.e.* iron (II, III) oxide (Fe_3O_4))**	48 (expressed as iron)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 3 % w/w.	Shall comply with the colorant purity requirements.[474]
0001317-65-3	**Limestone**				Only to be used for the manufacture of PP, PS, PE and PVDC.	Shall comply with the colorant purity requirements.[474]
0001326-04-1	**C.I. Pigment Violet 2**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC.	Shall comply with the colorant purity requirements.[474]
0001328-53-6	**C.I Pigment Green 7 (*i.e.* phthalocyanine green G or polychloro copper phthalocyanine)**	5 (expressed as copper)			Only to be used for the manufacture of POM, PBT, PMMA, PEI, PPE, PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0001332-37-2	**Iron oxide**	48 (expressed as iron)			Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET and UP at a maximum level of 3 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0001333-86-4	**C.I. Pigment Black 7 (*i.e.* carbon black)**				Only to be used for the manufacture of PMMA, PVC, PVDC, PU, UP, PF, PEI, PPE, PBT, PPS, POM and LC at a maximum level of 2.5 % w/w; PE at a maximum level of 3 % w/w; and PP, PS, AS, ABS, PA, PET and PC (used appropriately according to the production demand).	Shall comply with the colorant purity requirements.[474] Toluene extractables: less than 0.1 % determined according to ISO method 6209. UV absorption of cyclohexane extract at 386 nm: < 0.02 AU for a 1 cm cell or < 0.1 AU for a 5 cm cell, determined according to a generally recognized method of analysis. Benzo[a]pyrene content: less than 0.25 mg/kg carbon black. Maximum usage level of carbon black in the polymer: 2.5 % w/w.
0001333-88-6	**C.I. Pigment Blue 2 (*i.e.* cobalt aluminate)**	0.05 (expressed as cobalt)			Only to be used for the manufacture of PE, PP, PS and PVC at a maximum level of 5 % w/w.	Shall comply with the colorant purity requirements.[474]
0001344-28-1	**Aluminium oxide (*i.e.* activated alumina)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC.	Shall comply with the colorant purity requirements.[474]
0001345-16-0	**C.I. Pigment Blue 28 (*i.e.* cobalt blue or cobalt aluminate spinel)**	0.05 (expressed as cobalt)			Only to be used for the manufacture of PEI, PPE and PBT at a maximum level of 3 % w/w; and PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP (used appropriately according to the production demand).	Shall comply with the colorant purity requirements.[474]
0001533-45-5	**4,4'-bis(2-benzoxazolyl) stilbene**	0.05			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 0.025 % w/w.	Shall comply with the colorant purity requirements.[474]
0002379-74-0	**C.I. Pigment Red 181**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	Substance name	SML (and/ or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0002512-29-0	C.I. Pigment Yellow 1 (*i.e.* 2-(4-Methyl-2-nitrophenylazo)-N-phenyl-3-oxobutanamide)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0002786-76-7	C.I. Pigment Red 170 (*i.e.* 4-[[4-(amino-carbonyl)-phenyl] azo]-N-(2-ethoxyphen-yl)-3-hydroxy-2-naph-thalenecarboxamide)				Only to be used for the manufacture of PE, PP, PS, AS and ABS at a maximum level of 1 % w/w; and PMMA (used appropriately according to the production demand).	Shall comply with the colorant purity requirements.[474]
0003049-71-6	C.I. Pigment Red 178 (*i.e.* 2,9-bis[4-(phenylazo) phenyl]-anthra-[2,1,9-def: 6,5,10-d'e'f']-diisoquinoline-1,3,8,10(2H,9H)-tetrone)				Only to be used for the manufacture of ABS, PET, PE, PP, PS, AS, PA, PC, PVC, PVDC, UP, PPE and PBT at a maximum level of 1 % w/w; and PEI at a maximum level of 0.3 % w/w.	Shall comply with the colorant purity requirements.[474] The usage temperature of the produced materials and products shall be lower than 121ºC.
0003089-16-5	C.I. Pigment Red 207 (*i.e.* 4,11-dichloro-5,12-dihydroquino-[2,3-b] acridine-7,14-dione)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 0.025 % w/w.	Shall comply with the colorant purity requirements.[474]
0003089-17-6	C.I. Pigment Red 202 (*i.e.* 2,9-dichloro-5,12-dihydroquino-[2,3-b] acridine-7,14-dione)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0003333-62-8	7-(2H-naphtho[1,2-d]-triazol-2-yl)-3-phenyl-2H-1-benzopyran-2-one				Only to be used for the manufacture of PP and PE at a maximum level of 0.02 % w/w; and PET at a maximum level of 0.035 % w/w.	Shall comply with the colorant purity requirements.[474]
0003520-72-7	C.I. Pigment Orange 13				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0003905-19-9	**C.I. Pigment Red 166 (*i.e.* 2-naphthalenecarboxamide, N,N'-1,4-phenylene-bis[4-[(2,5-dichlorophenyl)azo]-3-hydroxy)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0004051-63-2	**C.I. Pigment Red 177 (*i.e.* 4,4'-diamino-[1,1-Bianthracene]-9,9',10,10'-tetrone)**	48 (expressed as iron)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0004118-16-5	**C.I. Pigment Yellow 147 (*i.e.* 1,1'-[(6-phenyl-1,3,5-triazine-2,4-diyl) diimino]-bis-9,10-anthracenedione)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC and PVC at a maximum level of 0.25 % w/w.	Shall comply with the colorant purity requirements.[474]
0004174-09-8	**2,4-Dihydro-4-[(5-hydroxy-3-methyl-1-phenyl-1H-pyrazol-4-yl) methylene]-5-methyl-2-phenyl-3H-pyrazol-3-one**				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0004424-06-0	**C.I. Pigment Orange 43 (*i.e.* bisbenzimidazo-[2,1-b:2',1'i]-benzo-[lmn][3,8] phenanthroline-8,17-dione)**				Only to be used for the manufacture of PE, PP, AS, PS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0004702-90-3	**C.I. Oil Yellow 93**				Only to be used for the manufacture of PS, AS, ABS, PET and PC at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0004851-50-7	**Solvent Green 28 (*i.e.*1,4-bis((4-(1,1-dimethylethyl) phenyl) amino)-5,8-dihydroxyanthraquinone**	0.5 µg/kg			Only to be used for the manufacture of PC at a maximum level of 0.2 % w/w; and PEI at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0004948-15-6	C.I. Pigment Red 149 (*i.e.* anthraquinone (red); or 2,9-bis-(3,5-dimethylphenyl) isoquino-[4',5',6':6,5,10]-anthra-[2,1,9-def]-isoquinoline-1,3,8,10(2H,9H)-tetrone				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, UP, PBT and PEI at a maximum level of 1 % w/w; and PPE at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0005045-40-9	C.I. Pigment Yellow 109				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005102-83-0	C.I. Pigment Yellow 13				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005280-68-2	C.I. Pigment Red 146 (*i.e.* N-(4-chloro-2,5-di-methoxyphenyl)-3-hy-droxy-4-[[2-me-thoxy-5-[(phenylami-no)-carbonyl]phenyl] azo]-2-naphthalenecar-boxamide)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005280-78-4	C.I. Pigment Red 144	48 (expressed as iron)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0005280-80-8	C.I. Pigment Yellow 95				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVD and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0005281-04-9	C.I. Pigment Red 57:1 (*i.e.* benzoic acid, 3,3'-[(2,5-dichloro-1,4-phenylene)-bis-[iminocarbonyl(2-hydroxy-3,1-naphthalenediyl) azo]]-bis-[4-methyl-, bis(1-methylethyl) ester)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005468-75-7	C.I. Pigment Yellow 14 (*i.e.* 2,2'-[(3,3'-dichlorobiphenyl-4,4'-diyl)-di-(*E*)-diazene-2,1-diyl]-bis-[N-(2-methylphenyl)-3-oxobutanamide])				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005521-31-3	C.I. Pigment Red 179				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005567-15-7	C.I. Pigment Yellow 83				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0005580-57-4	C.I. Pigment Yellow 83				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0005590-18-1	C.I. Pigment Yellow 110 (*i.e.* 3,3'-(benzene-1,4-diyldiimino)-bis-(4,5,6,7-tetrachloro-1H-isoindol-1-one))				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0005718-26-3	C.I. Disperse Orange 47 (*i.e.* methyl-2-[(1,5-dihydro-3-methyl-5-oxo-1-phenyl-4H-pyrazol-4-ylidene)-ethylidene]-1,3,3-trimethylindoline-5-carboxylate)				Only to be used for the manufacture of PPE at a maximum level of 0.2 % w/w; ABS at a maximum level of 0.13 % w/w; and PC at a maximum level of 0.04 % w/w.	Shall comply with the colorant purity requirements.[474]
0005850-80-6	C.I. Pigment Red 68 (*i.e.* 2-chlorine-5-[(2-hydroxyl-1-naphthyl) azo]-4-sulphocalcium benzoate)				Only to be used for the manufacture of PE, PP, PS, AS and ABS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0006358-31-2	C.I. Pigment Yellow 74 (*i.e.* 2-[(2-methoxy-4-nitrobenzophenone) azo]-N-(2-methoxyphenyl)-3-oxygen-2-[(2-methoxy-4-nitrobenzopheno ne)azo]-oxygen-butyrylamide)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0006408-72-6	C.I. Disperse Violet 26 (*i.e.* disperse Violet H-FRL or 1,4-diamino-2,3-diphenoxyanthracene-9,10-dione)				Only to be used for the manufacture of PPE at a maximum level of 0.01 % w/w; and ABS, PET and PS at a maximum level of 0.2 % w/w; and AS at a maximum level of 0.0003 % w/w.	Shall comply with the colorant purity requirements.[474] PS plastic materials and products to which the substance is added are only used to contact aqueous foods and foods having an alcohol content of not more than 50 % at a temperature not exceeding 66°C. The temperature of the AS plastic materials and articles to which they are added must not exceed 100°C.
0006410-41-9	C.I. Pigment Red 5				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0006505-28-8	C.I. Pigment Orange 16				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0006528-34-3	C.I. Pigment Yellow 65 (*i.e.* 2-[(4-methoxy-2-nitrophenyl)azo]-*N*-(2-methoxphenyl)-3-oxo-Butanamide)				Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0006535-46-2	C.I. Pigment Red 112 (*i.e.* 3-hydroxy-N-(o-tolyl)-4-(2,4,5-trichlorophenyl) azo-naphthalene-2-carboxamide)				Only to be used for the manufacture of PS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0006829-22-7	C.I. Solvent Red 179 (*i.e.* 14H-benz-[4,5]-isoquino-[2,1-a]-perimidin-14-one)				Only to be used for the manufacture of PEI at a maximum level of 0.15 % w/w; and PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0006925-69-5	C.I. Solvent Orange 60				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0007023-61-2	C.I. Pigment Red 48: 2				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0007576-65-0	C.I. Disperse Yellow 54				Only to be used for the manufacture of PS, AS, ABS, PET and PC at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements. [474]
0007727-43-7	C.I. Pigment White 21 (*i.e.* barium sulphate)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC and PVDC at a maximum level of 3 % w/w.	Shall comply with the colorant purity requirements.[474]
0008007-18-9	C.I. Pigment Yellow 53 (*i.e.* titanium yellow)				Only to be used for the manufacture of PEI, PPE, PBT, PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0010101-66-3	**Managanese violet**	0.6 (expressed as manganese)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0012001-26-2	**Mica**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 3 % w/w; and PEI, PPE and PBT at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0012227-89-3	**C.I. Pigment Black 11 (*i.e.* iron oxide black)**	48 (expressed as iron)			Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0012238-31-2	**C.I. Pigment Red 52: 2**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC.	Shall comply with the colorant purity requirements.[474]
0012239-87-1	**C.I. Pigment Blue 15**	5 (expressed as copper)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC, UP, PEI, PPE and PBT at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0012286-66-7	**C.I. Pigment Yellow 62**				Only to be used for the manufacture of PE, PP, PS and ABS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0012671-74-8	**C.I. Solvent Yellow 98 (*i.e.* 2-octadecyl-1H-benzo-[3,4]-isothiochromeno-[7,8,1-def] isoquinoline-1,3(2H)-dione)**	0.5 µg/kg			Only to be used for the manufacture of PC at a maximum level of 0.05 % w/w; PEI at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0012769-96-9	**C.I. Pigment Violet 15 (*i.e.* sodium aluminosilicate violet)**				Only to be used for the manufacture of PC, ABS, PEI, PPE and PBT at a maximum level of 3 % w/w.	Shall comply with the colorant purity requirements.[474]
0013463-67-7 / 0001317-80-2	**C.I. Pigment White 6 (*i.e.* titanium dioxide)**					Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0013676-91-0	**C.I. Solvent Yellow 163 (*i.e.* 1,8-Bis-(phenylthio)-9,10-anthracenedione)**	0.5 µg/kg			Only to be used for the manufacture of PC and ABS at a maximum level of 0.1 % w/w.	Shall comply with the colorant purity requirements.[474]
0014302-13-7	**C.I. Pigment Green 36 (*i.e.* [1,3,8,16,18,24-hexabromo-2,4,9,10,11,15,17,22,23,25-decachloro-29H, 31H-phthalocyaninato(2)-N-29,N30,N31,N32]copper)**	5 (expressed as copper)			Only to be used for the manufacture of PE, PP, PS, ABS, AS, PA, PET, PC and PVC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474] The usage temperature of the produced materials and products shall be lower than 70ºC.
0016294-75-0	**C.I. Solvent Orange (*i.e.* 14H-Anthra-(2,1,9-mna)-thioxanthen-14-one)**	0.5 µg/kg			Only to be used for the manufacture of PC and PBT at a maximum level of 0.1 % w/w.	Shall comply with the colorant purity requirements.[474]
0017741-63-8	**C.I. Pigment Violet 37 (*i.e.* N, N'-[6,13-bis(acetylamino)-2,9-diethoxy-3,10-triphenodioxazinediyl]-bis-benzamide)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0017772-51-9	**3-Hydroxy-2-(3-hydroxy-2-quinolinyl)-1H-inden-1-one**				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0018282-10-5	**Stannic oxide**	0.18 (expressed as tin)			Only to be used for the manufacture of PP and PE at a maximum level of 0.033 % w/w.	Shall comply with the colorant purity requirements.[474] Only used as pigment. The tin dioxide content in pigment shall be less than 1.1 %.
0020344-49-4	**C.I. Pigment Yellow 42 (*i.e.* iron hydroxide oxide)**	48 (expressed as iron)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]

Continued on next page

Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0020749-68-2	C.I. Solvent Red 135 (*i.e.* C.I. Oil Red 135; or 8,9,10,11-tetrachloro-12H-isoindolo-[2,1-a]-perimidin-12-one)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP (used appropriately according to the production demand); PPE, PEI at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0021295-57-8	C. I. Solvent Red 149 (*i.e.* 6-(cyclohexylamino)-3-methyl-3H-dibenz-[f,ij]-isoquinoline-2,7-dione)	0.5 µg/kg			Only to be used for the manufacture of ABS at a maximum level of 0.5 % w/w.	Shall comply with the colorant purity requirements.[474]
0021645-51-2	Aluminium hydroxide				Only to be used for the manufacture of PE, PP, AS, PS, ABS, PC, PA, PVDC, PET, PVC and UP.	Shall comply with the colorant purity requirements.[474]
0025191-90-6	Decanedioic acid, polymer with hexahydro-2H-azepin-2-one, 1,6-hexanediamine and hexanedioic acid				Only to be used for the manufacture of PA, POM and PBT.	Shall comply with the colorant purity requirements.[474]
0030125-47-4	C.I. Pigment Yellow 138 (*i.e.* 4,5,6,7-tetrachloro-2-[2-(4,5,6,7-tetrachloro-1,3-dioxo-2,3-dihydro-1H-inden-2-yl) quinolin-8-yl]-1H-isoindole-1,3(2H)-dione)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PEI, PPE, PBT and LCP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474] The usage temperature of the produced materials and products shall be lower than 70°C.
0031778-10-6	C.I Pigment Red 208 (*i.e.* 2-[[3-[[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl) amino]carbonyl]-2-hydroxyl-1-naphthyl] azo]-butyl ester)				Only to be used for the manufacture of PE, PP, AS, PS, ABS and PVDC at a maximum level of 1 % w/w; and PMMA (used appropriately according to the production demand).	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0031837-42-0	C.I. Pigment Yellow 151 (*i.e.* 2-[[1-[[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl) amino] carbonyl]-2-oxo propyl] azo] benzoic acid)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 2 % w/w.	Shall comply with the colorant purity requirements.[474]
0032724-62-2 / 0061969-44-6	C.I. Solvent Blue 97 (*i.e.* 1,4-bis((2,6-diethyl-4-methylphenyl) amino)-9,10-anthracenedione)				Only to be used for the manufacture of PS, AS, ABS, PA, PET and PC.	Shall comply with the colorant purity requirements.[474]
0035773-43-4	C.I. Solvent Yellow 160:1 (*i.e.* 3-(5-Chloro-2-benzoxazolyl)-7-(diethylamino)-2H-1-benzopyran-2-one)				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0035869-64-8	C.I. Pigment Brown 23				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0038720-66-0 / 0003573-01-1	C.I. Pigment Red 209 (*i.e.* 3,10-dichloro-5, 12-dichloro quino [2,3-b]acridine-7, 14-diketone"				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0040618-31-3	C.I. Pigment Red 214 (*i.e.* N,N'-(2,5-dichloro-1,4-phenylene)bis(4-((2,5-dichlorophenyl)azo)-3-hydroxynaphthalene-2-carboxamide))				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0041611-76-1	1,4-bis-[(2-ethyl-6-methylphenyl)amino] anthraquinone				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0042844-93-9	C.I. Pigment Orange 68 (*i.e.* [1,3-dihydroxy-5,6-bis[[(2-hydroxy-1-naphthalenyl)-metylene] amino]-2-H-Benzimidazole-2-onato-(2-)N5,N6,O5,O6-nickel)	0.01 (expressed as nickel)			Only to be used for the manufacture of PA, PBT, PM-MA, POM, PE, PP, PS, AS, ABS, PET and PC.	Shall comply with the colorant purity requirements.[474]
0043035-18-3	C.I. Pigment Red 247 (*i.e.* 4-[[3-[[2-hydroxyl-3-[[(4-methoxyphenyl)] amino]carbonyl]-1-aphthalenyl azo]-4-methoxybenzoyl] amino] benzenesulphonic acid calcium salt (2:1))				Only to be used for the manufacture of PA, PBT, POM (used appropriately according to the production demand); and PE, PP, PS, AS, ABS, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0051274-00-1	C.I. Pigment Yellow 42				Only to be used for the manufacture of PE, PP, PS, ABS, PET and PC.	Shall comply with the colorant purity requirements.[474]
0052357-70-7	C.I. Pigment Brown 6				Only to be used for the manufacture of PP, PE, PS, PVC, PA, PC, ABS, AS, PET, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0054079-53-7	C.I. Disperse Yellow 201 (*i.e.* N-[2-(4-phenylcyclohexane oxygroup) ethyl]-N-ethyl-4-(2, 2-dicyanvinyl)-3-toluidine)				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0057455-37-5	C.I. Pigment Yellow 29				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0059487-23-9	**C.I. Pigment Red 187 (*i.e.* 4-[[5-[[[4-(aminocarbonyl)phenyl] amino] carbonyl]-2-methoxyphenyl] azo]-N-(5-chloro-2,4-dimethoxyphenyl)-3-hydroxynaphthalene-2-carboxamide)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0065212-76-2	**Disodium,4,5-dichloro-2-[[4,5-dihydro-3-methyl-5-oxo-1-(3-sulphonato phenyl)-1H-pyrazol-4-yl]azo]benzene-sulphonate**				Only to be used for the manufacture of PE and PP at a maximum level of 0.1 % w/w.	Shall comply with the colorant purity requirements.[474]
0065212-77-3	**C.I. Pigment Yellow 183, calcium salt (*i.e.* calcium 4,5-dichloro-2-[[4,5-dihydro-3-methyl-5-oxo-1-(3-sulphonatophenyl)-1H-pyrazol-4-yl]azo] benzenesulphonate)**				Only to be used for the manufacture of PPE at a maximum level of 0.5 % w/w; and PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0068134-22-5	**C.I. Pigment Yellow 154 (*i.e.* N-(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)-3-oxo-2-[[2-(trifluoromethyl) phenyl] azo]-butanamide)**				Only to be used for the manufacture of PE, PP, AS, PS and ABS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0068186-85-6	**C.I. Pigment Green 50 (*i.e.* cobalt titanate green)**	0.05 (expressed as cobalt)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC:2; PEI, PPE and PBT.	Shall comply with the colorant purity requirements.[474]
0068186-86-7	**C.I. Pigment Blue 72**	5 (expressed as copper)			Only to be used for the manufacture of PE, PP and PA at a maximum level of 2.7 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0068186-90-3	**C.I. Pigment Brown 24 (*i.e.* chrome antimony titanium buff rutile)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC at a maximum level of 2 % w/w; and PEI, PPE, PBT, TPC-ET and POM at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0068186-91-4	**C.I. Pigment Black 28**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PVC at a maximum level of 5 % w/w.	Shall comply with the colorant purity requirements.[474]
0068187-11-1	**C.I. Pigment Yellow 36 (*i.e.* cobalt chromite blue)**	0.05 (expressed as cobalt)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 3 % w/w; and PEI, PPE and PBT at a maximum level of 0.5 % w/w.	Shall comply with the colorant purity requirements.[474]
0068187-51-9	**C.I. Pigment Yellow 119 (*i.e.* zinc ferrite brown spinel)**	25 (expressed as zinc)			Only to be used for the manufacture of PPE at a maximum level of 1 % w/w; and PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 3 % w/w.	Shall comply with the colorant purity requirements.[474]
0068187-54-2	**C.I. Pigment Black 23**				Only to be used for the manufacture of PE, PP and PA at a maximum level of 1.7 % w/w.	Shall comply with the colorant purity requirements.[474]
0068259-05-2	**C.I. Pigment Red 220**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0068296-59-3	**Solvent Yellow 104**	0.5 µg/kg			Only to be used for the manufacture of ABS at a maximum level of 0.1 % w/w.	Shall comply with the colorant purity requirements.[474]
0068512-13-0	**C.I. Pigment Green 36 (*i.e.* [copper, [9H,31H-phthalocyaninato-(2-)-N29, N30, N31, N32]-, brominated chlorinated)**	5 (expressed as copper)			Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET and PC.	Shall comply with the colorant purity requirements.[474]
0068855-54-9	**Diatomaceous earth subject to heat treatment by sodium carbonate**				Only to be used for the manufacture of PE, PP.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0068987-63-3	**[Copper, [29H,31H-phthalocyaninato-N29, N30, N31, N32]-, chlorinated**	5 (expressed as copper)			Only to be used for the manufacture of PE, PP, PS and PVC at a maximum level of 0.1 % w/w.	Shall comply with the colorant purity requirements.[474]
0070546-25-7	**3-(2-Benzothiazolyl)-7-(diethylamino)-2-oxo-2H-1-Benzopyran-4-carbonitrile**				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0071566-54-6	**C.I. Pigment Red 221 (*i.e.* benzoic acid,3,3'-[(2,5-dichloro-1,4-phenylene)-bis-[iminocarbonyl(2-hydroxy-3,1-naphthalenediyl) azo]]-bis-[4-methyl-bis-(1-methylethyl)ester)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0071701-33-2	**C.I. Oil Violet 37**				Only to be used for the manufacture of PS, AS and ABS at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0071832-85-4	**C.I. Pigment Yellow 168**				Only to be used for the manufacture of PE, PP, PS and ABS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0072102-84-2	**C.I. Pigment Orange 64 (*i.e.* 5-[(2,3-dihydro-6-methyl-2-oxo-1H-benzimidazol-5-yl) azo]-2,4,6-(1H,3H,5H) pyrimidinetrione**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0072968-71-9	**Methyl-4-cyano-5-[[5-cyano-2,6-bis[(3-methoxypropyl) amino]-4-methyl-3-pyridyl]azo]-3-methyl-2-thenoate**				Only to be used for the manufacture of PS, AS, ABS, PC, PVC (used appropriately according to the production demand); and PET at a maximum level of 0.1 % w/w.	Shall comply with the colorant purity requirements.[474] Not to be used in contact with alcoholic foods (EtOH content > 10 %).

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0074441-05-7	C.I. Pigment Yellow 181 (*i.e. N*-[4-(aminocarbonyl) phenyl]-4-[[1-[[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl) amino]carbonyl]-2-oxopropyl]azo] benzamide				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0075198-96-8	2-[[4-(Diethylamino)-2-methylphenyl]azo]-5-methylbenzene-1,3-dicarbonitrile				Only to be used for the manufacture of PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0075641-02-0	2-[(1,3-Dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-5,12-dihydroquino[2,3-b] acridine-7,14-dione				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 0.05 % w/w.	Shall comply with the colorant purity requirements.[474]
0077804-81-0	C.I. Pigment Yellow 180				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET and PC at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0079953-85-8	C.I. Pigment Yellow 128 (*i.e.* 3,3'-[(2-chloro-5-methyl-p-phenylene)-bis[imino(1-acetyl-2-oxoethylene) azo]] bis[4-chloro-N-[2-(4-chlorophenoxy)-5-(trifluoromethyl)phenyl] benzamide])				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0083249-52-9	C. I. Disperse Yellow 241 (*i.e.* 5-[(3,4-dichlorophenyl) azo]-1,2-dihydro-6-hydroxy-1,4-dimethyl-2-oxo-3-pyridinecarbonitrile)				Only to be used for the manufacture of PET at a maximum level of 0.02 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0084632-50-8	**C.I. Pigment Orange 71**				Only to be used for the manufacture of PE, PP, PS and ABS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0084632-65-5	**C.I. Pigment Red 254**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0084632-66-6	**C.I. Pigment Red 272**				Only to be used for the manufacture of PE, PP and PS at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0088949-33-1	**C.I. Pigment Red 264**				Only to be used for the manufacture of PE, PP, PS, ABS and PET at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0106276-78-2	**C.I. Pigment Orange 61 (*i.e.* 2,3,4,5-tetrachloro-6-cyano-, methyl ester, reaction products with 4-[(4-aminophenyl)azo]-3-methylbenzenamine and sodium methoxide)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP.	Shall comply with the colorant purity requirements.[474]
0114013-41-1	**C.I. Solvent Red 151**	0.05 µg/kg			Only to be used for the manufacture of ABS at a maximum level of 0.5 % w/w.	Shall comply with the colorant purity requirements.[474]
0124649-82-7	**2-Naphthalenesulphonic acid, 4-hydroxy-3-2-methoxy-5-methyl-4-(4-sulphophenyl) azophenylazo-7-(phenylamino)-, compound with nitrilotris-(2,1-ethanediyloxy) trispropanol (1:2)**				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PET, PC.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	**Substance name**	**SML (and/ or QMA) [mg/kg]**	**Group restriction No**	**SML (T) [mg/kg]**	**Restrictions and specifications**	**Notes on verification of compliance**
0154946-66-4	C.I. Pigment Yellow 191:1 (*i.e.* benzenesulphonic acid, 4-chloro-2-4,5-dihydro-3-methyl-5-oxo-1-(3-sulphophenyl)-1H-pyrazol-4-ylazo-5-methyl-, diammonium salt)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0198625-33-1	6-(2,5-Dimethylbenzo-yl)-3-hydroxy-2-(3-hy-droxy-2-quinolin-yl)-1H-inden-1-one				Only to be used for the manufacture of PS, AS, ABS, PA, PC and PVC (used appropriately according to the production demand); and PET at a maximum level of 0.2 % w/w.	Shall comply with the colorant purity requirements.[474]
0215247-95-3 / 0006358-30-1	C.I. Pigment Violet 23 (*i.e.* 8,18-dichloro-5,15-diethyl-5,15-dihydrodiindolo(3,2-b:3',2'-m) triphenodioxazine				Only to be used for the manufacture of PBT, PMMA and POM (used appropriately according to the production demand); and PE, PP, PS, AS, ABS, PET, PC, PV, PVC, PVDC and UP at a maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0247089-62-9	1,4-Bis(4-octadecylsul-phanylphenyl)-2,5-di-hydropyrrolo[3,4-c] pyrrole-3, 6-dione				Only to be used for the manufacture of PE, PP, PS, ABS, AS, PA, PET, PC and PVC at a maximum level of 0.015 % w/w.	Shall comply with the colorant purity requirements.[474]
0253430-12-5	4,4'-Dimethyl-3,3'-[chloro-*p*-phenylene bis[iminocarbonyl(a cetyl)methyleneazo]] dibenzamide				Maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474]
0346709-25-9	C.I. Pigment Yellow 215 (*i.e.* 4-methylbenzene-sulphonate pyrimido [5, 4, g] pteridine-2, 4, 6, 8-alkaline hydrolysis products of ammonia)				Only to be used for the manufacture of PE, PP, PS, AS, ABS, PA, PET, PC, PVC, PVDC and UP at a maximum level of 0.5 % w/w.	Shall comply with the colorant purity requirements.[474]

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Colorant positive list						
CAS No	Substance name	SML (and/or QMA) [mg/kg]	Group restriction No	SML (T) [mg/kg]	Restrictions and specifications	Notes on verification of compliance
0250640-08-5	C.I. Pigment orange 79 (*i.e.* benzoic acid, 4-[(2-hydroxy-6-sulpho-1-naphthalenyl)azo]-, strontium salt (2:1))				Maximum level of 1 % w/w.	Shall comply with the colorant purity requirements.[474] The maximum usage temperature for plastic materials and articles containing this substance shall be 121ºC.

6. INDITEX MANUFACTURING POSITIVE LIST FOR FOOD CONTACT MATERIALS MADE OF SILICONE

a) Starting materials positive list

Starting Materials Positive List				
CAS No.	Chemical name	Type[475]	Restrictions and specificiations	Markets with usage ban
–	Linear or branched and/or cyclic organopolysiloxanes with methyl groups attached to the silicon atom alone or partially replaced by n-alkyl (C_2-C_{32}), phenyl and/or hydroxyl groups, and their condensation products with polyethylene and/or polypropyleneglycol	–	Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber).	
–	Linear or branched and/or cyclic organopolysiloxanes with methyl groups attached to the silicon atom alone or partially replaced by n-alkyl (C_2-C_{32}), phenyl and/or hydroxyl groups, and their condensation products with polyethylene and/or polypropyleneglycol but in addition with up to max. 5 % hydrogen and/or alkoxy (C_2-C_4) and/or carboalkoxyalkyl [-$(CH_2)_{2,17}$-C(O)-O-$(CH_2)_{0,17}$-CH_3)-] and/or hydroxyalkyl groups attached to the silicon atom	–	Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber).	
–	1-Docene	–	Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber) at a maximum level of 20 % w/w.	
–	Addition products of trivinyl cyclohexane and α, ω-Dihydrogenpolyhydrogen-methyldimethyl-siloxanes	–	Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber) at a maximum level of 10 % w/w.	
–	Organopolysiloxanes with vinyl groups attached to the silicon atom	–	Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber).	

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475 Shall not be allowed to combinate compounds of type A with compounds of type B to production of silicone articles. This classification does not apply to silicone elastomers.

Starting Materials Positive List				
CAS No.	**Chemical name**	**Type[475]**	**Restrictions and specifications**	**Markets with usage ban**
–	**Polydimethyl- siloxanes and -silicones, 3-aminopropyl-group terminated, polymers with 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane**	–	Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber). Specifical restrictions for 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane and 1-amino-3-Specifical restrictions for 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane and 1-amino-3-aminomethyl-3,5,5-trimethylcyclohexane, laid down in the Commission Regulation (EU) No 10/2011, must be complied with.	
–	**Polydimethyl- siloxanes and -silicones, 3-aminopropyl-group terminated, polymers with bis(4-isocyanatocyclohexyl)methane**	–	Only to be used for the manufacture of silicone resins. Only to be used for the manufacture of silicone elastomers (*i.e.* silicone rubber). Specifical restrictions for bis(4-isocyanatocyclohexyl)methane and bis(4-aminocyclohexyl)methane, laid down in the Commission Regulation (EC) No 10/2011, must be complied with.	
0000075-54-7	**Dichloro methyl silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000075-77-4	**Chloro trimethy silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000075-78-5	**Dichloro dimethyl silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000075-79-6	**Trichloro methy silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000078-62-6	**Diethoxy dimethyl silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000080-10-4	**Dichloro diphenyl silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000098-13-5	**Trichloro phenyl silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000124-70-9	**Dichlorovinyl methy silane**	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	

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Starting Materials Positive List				
CAS No.	**Chemical name**	**Type[475]**	**Restrictions and specificiations**	**Markets with usage ban**
0000780-69-8	Triethoxy phenyl silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0001066-35-9	Dimethyl chloro silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0001112-39-6	Dimethoxy dimethyl silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0001185-55-3	Methyl trimethoxy silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0001719-58-0	Chlorovinyl dimethy silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0002031-67-6	Triethoxy methyl silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0002553-19-7	Diethoxy diphenyl silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0002768-02-7	Vinyl trimethoxy silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0002996-92-1	Phenyl trimethoxy silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0006843-66-9	Dimethoxy diphenyl silane	A	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type A. It shall not be used in contact to acid and alcoholic foodstuffs	
0000077-85-0	Trimethylolethane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	European Union
0000077-99-6	Trimethylolpropane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	

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Starting Materials Positive List				
CAS No.	**Chemical name**	**Type[475]**	**Restrictions and specificiations**	**Markets with usage ban**
0000100-21-0	Terephthalic acid	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0000106-86-5	1,2-Epoxy-4-vinylcyclohexane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	European Union
0000107-21-1	Ethyleneglycol	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0000121-91-5	Isophthalic acid	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0001066-35-9	Dimethyl chloro silane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0001112-39-6	Dimethoxy dimethyl silane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0001185-55-3	Methyl trimethoxy silane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0002768-02-7	Vinyl trimethoxy silane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	
0002996-92-1	Phenyl trimethoxy silane	B	Only to be used for the manufacture of silicone resins. Only to be used in combination with one or more monomers of type B. It shall not be used to produce articles in contact to acid and alcoholic foodstuffs.	

b) Monomers, additives and other substances positive list

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
–	Substances listed in section 5. c) of Annex II of this manual.					Substances listed in section 5. c) of Annex II of this manual are permitted substances subjected to the rules and restrictions of use contained therein.		
–	Beechnut oil fatty acids							5
–	Calcium salts of straight-chain aliphatic saturated monocarboxylic acids C10-C20						Japan	
–	Carbon fiber							50
–	Corn oil fatty acids							15
–	Cotton					Shall not be use recycled cotton.		50
–	Cottonseed oil fatty acids							5
–	Dicyclopentadiene-indene-styrene-alpha-methylstyrene-vinyltoluene-isobutylene, copolymer, hydrogenated		5				Japan	
–	Erucilamide					Maximum level of 0.2 % w/w.		50
–	Fatty acids, sunflower oil							15
–	Fatty acids, tall oil, cobalt salts			All cobalt derivatives	0.05 (expressed as cobalt)		Japan	
–	Fish oil fatty acids							15
–	Glass fiber					Diameter > 1 mm (average > 5 mm)		50

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476 This restriction does not apply to silicone elastomers (*i.e.* silicone rubber).

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
–	**Glass microball**					Diameter: 5 - 100 mm.		50
–	**Graphite**							30
–	**Grinded silicone elastomer**					Grinded silicone elastomer obtained by grinding clean scraps of silicone elastomers in accordance with this manual.		50
–	**Hempseed oil fatty acids**							5
–	**Linolamide**							50
–	**Linseed oil fatty acids**							5
–	**Platinum**					Pt: < 120 mg / kg		0.01
–	**Polyethylene glycol stearate**							50
–	**Polyethyleneglycol esters of natural fatty acids**						Japan	
–	**Polyterpenes**		nd				Japan	
–	**Polyvinyl acetate, partially hydrolyzed**		nd			Minimum hydrolysis degree 20 % molar.		20
–	**Quarz**							40
–	**Silica**							50
–	**Silicates, natural** (with the exception of asbestos)							50
–	**Silicic acid, salts**							50
–	**Silylated silica**							50
–	**Sodium aluminate**						Japan	
–	**Synthetic paraffin**		nd					50

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Monomers, additives, and other substances positive list								
CAS No	**Substance Name**	**FRF applicable**	**SML (and/ or QMA) [mg/kg]**	**Group restriction**	**SML (T) (and/or QMA(T)) [mg/kg]**	**Restrictions and specifications**	**Markets with usage ban**	**Restriction of use (%)[476]**
–	**Titanic acid esters** (including isobutylic alcohol, n. butyl, isopropyl, enolate of ethyl acetoacetate)					Maximum level of 3 % w/w.	Japan	
–	**Walnut oil fatty acids**							15
–	**Wheat protein**						Japan	
–	**Zinc dust**						Japan	
0000110-05-4	**Di-tert-butyl peroxide**						Japan	
–	**Aluminium bronze** (4 - 7 % aluminium)						Japan	
0000050-99-7	**Glucose**							30
0000057-13-6	**Urea**							30
0000057-50-1	**Sucrose**							1.6
0000064-18-6	**Formic acid**							5
0000067-56-1	**Methanol**							3
0000071-23-8	**1-Propanol** (*i.e.* N-propyl alcohol)							0.001
0000071-36-3 /0000078-83-1 /0000078-92-2 /0000075-65-0	**1-Butanol**							0.1
0000075-07-0	**Acetaldehyde**		1	6 (expressed as acetaldehyde)				0.01
0000075-09-2	**Methylene chloride**		0.05				Japan	
0000075-56-9	**1, 2-Epoxy propane** (*i.e.* propylene oxide)	nd [and QMA: 1 mg/kg in final product]						0.00001
0000075-65-0	***tert*-Butanol**							5

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Monomers, additives, and other substances positive list								
CAS No	**Substance Name**	**FRF applicable**	**SML (and/ or QMA) [mg/kg]**	**Group restriction**	**SML (T) (and/or QMA(T)) [mg/kg]**	**Restrictions and specifications**	**Markets with usage ban**	**Restriction of use (%)[476]**
0000077-58-7	Dibutyltin dilaurate						Japan	
0000078-08-0	Vinyltriethoxysilane	0.05			Only to be used as a surface treatment agent.			6
0000078-27-3	1-Ethynyl-1-cyclohexanol					Maximum level of 0.1 % w/w.	Japan	
0000078-63-7	2,5-Dimethyl-2,5-di-(*tert*-butylperoxy)hexane					Maximum level of 0.2 % w/w.	Japan	
0000078-93-3	Methyl ethyl ketone		5					0.001
0000079-11-8	Monochloroacetic acid		0.05				Japan	
0000079-14-1	Glycolic acid				Only to be used for manufacture of polyglycolic acid (PGA) for (i) indirect food contact behind polyesters such as polyethylene terephthalate (PET) or polylactic acid (PLA); and (ii) direct food contact of a blend of PGA up to 3 % w/w in PET or PLA.			0.5
0000080-05-7	2,2-Bis-(4-hydroxyphenyl)-propane (*i.e.* bisphenol A)	0.05				Not to be used for the manufacture of polycarbonate infant feeding bottles. Not to be used for the manufacture of polycarbonate drinking cups or bottles which, due to their spill proof characteristics, are intended for infants and young children.		0.003
0000080-43-3	Dicumyl peroxide						Japan	

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Monomers, additives, and other substances positive list								
CAS No	**Substance Name**	**FRF applicable**	**SML (and/ or QMA) [mg/kg]**	**Group restriction**	**SML (T) (and/or QMA(T)) [mg/kg]**	**Restrictions and specifications**	**Markets with usage ban**	**Restriction of use (%)[476]**
0000080-62-6	**Methyl methyacrylate**		23	6 (expressed as methacrylic acid)				5
0000084-66-2	**Diethyl phthalate**		nd				Japan	
0000087-78-5	**Mannitol**						Japan	
0000088-12-0	**Vinylpyrrolinone**		nd				Japan	
0000089-05-4	**Pyromellitic acid**		0.05				Japan	
0000089-32-7	**Benzenetetracarboxylic anhydride** (*i.e.* 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone; or pyromellitic anhydride)	0.05				SML expressed as pyromellitic acid.		1
0000090-72-2	**2,4,6-Tris[(dimethylamino) methyl]phenol**		nd				Japan	
0000091-76-9	**2, 4-Diamino-6-phenyl-1, 3, 5-triazine**	5						35
0000092-84-2	**Phenothiazine**		nd					4
0000094-36-0	**Benzoyl peroxide**						Japan	
0000097-53-0	**Eugenol**	nd	33	nd (expressed as eugenol)				0.8
0000098-00-0	**Furfurol**		nd				Japan	
0000098-29-3	**4-*tert*-Butylcatechol**		nd					1
0000100-42-5	**Styrene**							5
0000100-51-6	**Benzyl alcohol**							40
0000101-77-9	**Bis(4-aminophenyl) methane**		nd				Japan	

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Monomers, additives, and other substances positive list								
CAS No	**Substance Name**	**FRF applicable**	**SML (and/ or QMA) [mg/kg]**	**Group restriction**	**SML (T) (and/or QMA(T)) [mg/kg]**	**Restrictions and specifications**	**Markets with usage ban**	**Restriction of use (%)[476]**
0000102-71-6	Triethanolamine		0.05 (including the hydrochloric aduct).					5
0000102-76-1	Glycerol triacetate						Japan	
0000103-11-7	2-Ethylhexyl acrylate	0.06						5
0000104-15-4	p-Toluenesulphonic acid		nd					5
0000104-40-5	4-Nonylphenol		nd				Japan	
0000104-76-7	2-Ethyl hexanol	30						5.5
0000106-14-9	12-Hydroxystearic acid							10
0000106-63-8	2-Propenoic acid, 2-methylpropyl ester; acrylic acid, isobutyl ester		22	6 (expressed as acrylic acid)				5
0000106-91-2	Glycidyl methacrylate (*i.e.* methacrylic acid, 2,3-epoxypropyl ester)	0.02				Where reaction may occur between glycidyl methacrylate and the food or food simulant contacted by the former, 0.02mg/6 dm^2 (QMA) is regarded as its limit value.		2
0000108-01-0	2-Dimethylaminoethanol	18						10
0000108-10-1	Isobutyl methyl ketone		5					1
0000108-31-6	Maleic anhydride		3	30 (expressed as maleic acid)				1
0000108-88-3	Toluene		1.2					0.1
0000108-90-7	Monochlorobenzene		36					0.1
0000109-86-4	Ethylene glycol monomethyl ether			See note[477]	3		Japan	

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477 Group restriction formed by substances with the following CAS No.: 0000109-86-4; 0000110-80-5; 0000111-76-2; 0000111-90-0; and 0000112-34-5.

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0000109-99-9	Tetrahydrofuran		0.6				Japan	
0000110-30-5	N,N'-ethylenedi(stearamide)							50
0000110-80-5	Ethyleneglycol monoethyl ether			See note[477]	3		Japan	
0000111-42-2	Diethanolamine		nd					1
0000111-76-2	Ethyleneglycol monobutyl ether			See note[477]	3			5
0000111-90-0	Diethylene glycol monoethyl ether			See note[477]	3			7
0000112-24-3	Triethylenetetramine		nd				Japan	
0000112-34-5	Diethylene glycol monobuthyl ether			See note[477]	3			5
0000112-57-2	Tetraethylenepentamine		nd				Japan	
0000112-92-5	1-Octadecanol							50
0000115-19-5	2-Methyl-3-butyne ol-2					Maximum level of 0.1 % w/w.	Japan	
0000121-33-5	Vanillin						Japan	
0000121-69-7	N,N-Dimethylaniline		nd					3
0000122-52-1	Phosphorous acid, triethyl ester	nd [or QMA: 1 mg/kg in final product]				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.		1
0000124-40-3	Dimethylamine		0.06				Japan	
0000126-00-1	4,4-Bis(hydroxyphenyl) pentanoic acid		nd				Japan	
0000131-11-3	Dimethyl phthalate		nd				Japan	

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Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0000133-14-2	2,4-Dichlorobenzoyl peroxide						Japan	
0000141-32-2	Butyl acrylate		22	6 (expressed as acrylic acid)				5
0000141-97-9	Acetylacetic acid, ethyl ester		nd					1
0000142-77-8	Oleic acid, butyl ester		nd					5
0000143-28-2	Oleyl alcohol							1
0000149-44-0	Hydroxymethanesulphinic acid, sodium salt		nd					3
0000150-39-0	N-(2-hydroxyethyl) ethylenediaminetriacetic acid and its alkaline salts		nd				Japan	
0000301-02-0	Oleamide							50
0000471-34-1	Calcium carbonate							50
0000555-43-1	Glycerol tristearate						Japan	
0000629-54-9	Palmitamide							50

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Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0000652-67-5	1,4:3,6-Dianhydrosorbitol	5			Only to be used as: (a) a co-monomer in poly(ethylene-co-isosorbide terephthalate); (b) a co-monomer at levels of up to 40 mole % of the diol component in combination with ethylene glycol and/or 1,4-bis(hydroxymethyl) cyclohexane, for the production of polyesters. Polyesters made using dianhydrosorbitol together with 1,4-bis(hydroxymethyl) cyclohexane shall not be used in contact with foods containing more than 15 % alcohol.			2
0000814-78-8	Methyl isopropenyl ketone		nd				Japan	
0000872-05-9	1-Decene	0.05						5
0000919-30-2	3-Aminopropyltriethoxysilane	0.05				Residual extractable content of 3-aminopropyltriethoxysilane to be less than 3 mg/kg filler when used for the reactive surface treatment of inorganic fillers. SML = 0.05 mg/kg when used for the surface treatment of materials and articles.		5
0001067-33-0	Dibutyltin diacetate					Maximum level of 1.5 % w/w.	Japan	
0001187-93-5	Perfluoromethyl perfluorovinyl ether		0.05			Only to be used in non-stick coatings.	Japan	

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Monomers, additives, and other substances positive list								
CAS No	**Substance Name**	**FRF applicable**	**SML (and/ or QMA) [mg/kg]**	**Group restriction**	**SML (T) (and/or QMA(T)) [mg/kg]**	**Restrictions and specifications**	**Markets with usage ban**	**Restriction of use (%)[476]**
0001204-28-0	4-(Chloroformyl)phthalic anhydride		0.05 (as chloride, calculated as trimellitic acid)				Japan	
0001305-62-0	Calcium hydroxide					If the additive is food grade the content restriction does not apply.		30
0001305-78-8	Calcium oxide							50
0001309-37-1	Iron oxide							30
0001309-42-8	Magnesium hydroxide							30
0001309-48-4	Magnesium oxide							30
0001310-65-2	Lithium hydroxide			All lithium derivatives	0.6 (expressed as lithium)		Japan	
0001314-13-2	Zinc oxide					The zinc content must not exceed 1 % of finished article.		50
0001314-56-3	Phosphoric anhydride						Japan	
0001323-83-7	Glycerol distearate						Japan	
0001330-20-7	Xylene		1.2					5
0001333-86-4	Carbon black					See colorant purity requirements in section 6 c) of Annex II of this manual.		25
0001336-93-2	Naphthenic acids, manganese salts		nd					3
0001344-28-1	Aluminium oxide							50
0001345-05-7	Lithopone					Free of water-soluble barium.	Japan	
0002162-74-5	Bis-(2,6-diisopropylphenyl)-carbodiimide	0.05			Expressed as the sum of bis-(2,6-diisopropylphenyl)-carbodiimide and its hydrolysis product 2,6-diisopropylaniline.			1.6

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Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0002163-42-0	2-Methyl-1,3-propanediol		5				Japan	
0002425-79-8	1,4-Butanediol-bis-(2,3-epoxypropyl) ether	nd [or QMA: 1 mg/kg in final product (expressed as epoxy group)]			Molecular weight is 43 Da.	Verification of compliance by residual content per food contact surface area (QMA) in case of reaction with food or simulant.		0.1
0002530-83-8	[3-(2,3-Epoxypropoxy) propyl]-trimethoxy silane				Only to be used as a component of a sizing agent to treat glass fibres to be embedded in glass-fibre-reinforced low diffusivity plastics (polyethylene terephthalate (PET), polycarbonate (PC), polybutylene terephthalate (PBT), thermoset polyesters and epoxy bisphenol vinylester) in contact with all foodstuffs. In treated glass fibres, residues of the substance must not be detectable at 0.01 mg/kg for the substance and 0.06 mg/kg for each of the reaction products (hydrolysed monomers and epoxy-containing cyclic dimer, trimer and tetramer).			5

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Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0002530-85-0	[3-(Methacryloxy)propyl]-trimethoxysilane	0.05			Only to be used as a surface treatment agent of inorganic fillers.	Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.Only a method of analysis for the determination of the residual monomer in the treated filler is available.		2
0002634-33-5	1,2-Benzisothiazolin-3-one		0.5			Only to be used in aqueous polymeric dispersions and emulsions at concentrations that do not result in an antimicrobilan efect on the polymeric surface or on the foodstuff.		1
0002855-13-2	1-Amino-3-aminomethyl-3,5,5-trimethylcyclohexane	6						0.5
0003159-62-4	12-Hydroxystearic acid, calcium salt							10
0003648-18-8	Diester of lauric acid with dioctyltin							0.5
0003825-26-1	Perfluorooctanoic acid, ammonium salt					Only to be used in articles intended for repeated use sintered at high temperatures.	Japan	
0003965-55-7	3,5-Bis-(methoxycarbonyl) benzenesulphonic acid sodium salt	0.05						5
0004767-03-7	2,2-Bis(hydroxymethyl) propionic acid	0.05				Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.		3
0006535-19-9	n-Octanoic acid, manganese salt			All manganese derivatives	0.6 (expressed as manganese)		Japan	
0006700-85-2	n-Octanoic acid, cobalt salt			All cobalt derivatives	0.05 (expressed as cobalt)			3

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Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0007435-02-1	Cerium octanoate		nd				Japan	
0007646-78-8	Tin (IV) chloride						Japan	
0007681-53-0	Sodium hypophosphite							1.6
0007697-37-2	Nitric acid							0.001
0007705-08-0	Iron trichloride						Japan	
0007727-43-7	Barium sulfate							50
0007778-18-9	Calcium sulfate							50
0007786-30-3	Magnesium chloride							1
0008001-20-5	Chinawood oil		nd					20
0008001-21-6	Sunflower oil							15
0008001-23-8	Safflower oil							20
0008001-26-1	Linseed oil							20
0008001-29-4	Cottonseed oil							20
0008001-30-7	Corn oil							15
0008001-31-8	Coconut oil							15
0008001-78-3	Castor oil, hydrogenated							50
0008002-11-7	Poppyseed oil							20
0008002-13-9	Rapeseed oil							20
0008002-23-1	Spermaceti wax		nd					1
0008002-26-4	Tall oil						Japan	

Continued on next page

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0008002-74-2	Paraffin waxes and Hydrocarbon waxes		nd					50
0008006-54-0	Lanolin						Japan	
0008008-74-0	Sesame oil							15
0008012-95-1	Paraffin oil		nd					50
0008015-74-5	Beechnut oil							20
0008015-80-3	Candlenut oil		nd					20
0008016-11-3	Linseed oil, epoxidized. Oxirane < 6		nd					30
0008016-13-5	Fish oil						Japan	
0008016-24-8	Hempseed oil							20
0008016-49-7	Pumpkinseed oil							20
0008024-09-7	Walnut oil							20
0009000-59-3	Shellac							1.6
0009002-89-5	Polyvinyl alcohols		nd			Viscosity of a 4 % aqueous solution at 20°C is at least 2 centipoises.	Japan	
0009003-27-4	Polyisobutene		nd					20
0009004-35-7	Cellulose acetate							20
0009004-36-8	Cellulose acetate butyrate							20
0009004-39-1	Cellulose acetate propionate						Japan	
0009004-57-3	Ethylcellulose						Japan	
0009004-70-0	Nitrocellulose							11

Continued on next page

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0009004-96-0	Polyethyleneglycol monooleate						Japan	
0009005-02-1	Polyethylene glycol dilaurate						Japan	
0009005-07-6	Polyethylene glycol dioleate							50
0009008-34-8	Resin acids and rosin acids, manganese salts			All manganese derivatives	0.6 (expressed as manganese)		Japan	
0009009-32-9	Polyglyceryl stearate							50
0009014-85-1	Polyethyleneglycol 2,4,7,9-tetramethyl-5-decyn-4,7-diol ether							10
0010045-89-3	Iron(II) diammonium bisulphate		48 (expressed as iron)					50
0012004-14-7	Sulfoaluminate, calcium salt							0.01
0012125-02-9	Ammonium chloride							5
0013463-67-7	Titanium oxide							50
0014455-29-9	Aluminium carbonate							50
0015646-96-5	2,4,4-Trimethylhexane-1,6-diisocyanate				nd (expressed as isocyanate moiety) [and QMA(T): 1 mg/kg in final product (expressed as isocyanate moiety)]		Japan	
0016577-52-9	n-Octanoic acid, lithium salt			All lithium derivatives	0.6 (expressed as lithium)			0.15

Continued on next page

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0016938-22-0	2,2,4-Trimethylhexane-1,6-diisocyanate				nd (expressed as isocyanate moiety) [and QMA(T): 1 mg/kg in final product (expressed as isocyanate moiety)]		Japan	
0018312-04-4	Zirconium octanoate		nd					3
0020768-67-6	Aluminium hydroxide							50
0023389-33-5	Magnesium carbonate							50
0024938-37-2	Polyethyleneglycol adipate		nd				Japan	
0025154-52-3	Nonylphenol		nd				Japan	
0025383-99-7	Stearoyl-2-lactylic acid, sodium salt (= E481)						Japan	
0025395-31-7	Glycerol diacetate						Japan	
0025496-72-4	Glycerol monooleate							50
0025637-84-7	Glycerol dioleate							50
0026172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one		nd					5
0026471-62-5	Toluene diisocyanate				nd (expressed as isocyanate moiety) [and QMA(T): 1 mg/kg in final product (expressed as isocyanate moiety)]		Japan	
0031566-31-1	Glycerol monostearate							50
0034590-94-8	Dipropyleneglycol monomethyl ether		nd					5
0036653-82-4	1-Hexadecanol							50

Continued on next page

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0037349-34-1	Polyglycerol monostearate						Japan	
0052270-44-7	Cobalt (II) neodecanoate			All cobalt derivatives	0.05 (expressed as cobalt)		Japan	
0053801-45-9	Zirconium oxide		nd				Japan	
0055799-16-1	Zinc hydroxyphosphite							10
0061788-89-4	Acids, fatty, unsaturated (C18), dimers, non-hydrogenated, distilled and non-distilled		18	0.05 (expressed as the sum of the substances)		Verification of compliance by residual content per food contact surface area (QMA) pending the availability of an analytical method.		0.57
0061789-44-4	Castor oil fatty acids						Japan	
0061789-51-3	Naphthenic acids, cobalt salts		nd					3
0061789-97-7	Tallow							
0061790-39-4	Castor oil fatty acids, hydrogenated							5
0061790-53-2	Diatomaceous earth							50
0063231-60-7	Paraffin waxes and Hydrocarbon waxes, microcrystalline		nd					50
0065997-06-0	Rosin, partially hydrogenated							5
0068441-37-2	α-Methylstyrene-styrene, copolymer, hydrogenated		5				Japan	
0068441-38-3	α-Methylstyrene-vinyltoluene, copolymer, hydrogenated		5				Japan	

Continued on next page

Monomers, additives, and other substances positive list								
CAS No	Substance Name	FRF applicable	SML (and/ or QMA) [mg/kg]	Group restriction	SML (T) (and/or QMA(T)) [mg/kg]	Restrictions and specifications	Markets with usage ban	Restriction of use (%)[476]
0068938-15-8	Fatty acids, coco, hydrogenated							0.1
61789-45-5	Castor oil fatty acids, dehydrated							5
9002-84-0	Polytetrafluoroethylene					Viscosity: > 50 Pa.s. at 380 ° C.		5
9004-34-6	**Cellulose** (with the exception of recycled cellulose)							40

c) Colorant purity requirements

Restrictions for colorants to be used in the manufacture of food contact materials made of silicone		
CAS No	Substance name	Notes on verification of compliance
–	**All colorants to be used in the manufacture of FCM made of silicone**	Shall comply with the colorant purity requirements: 1) The content of metals and metalloids soluble in 0.1 M hydrochloric acid, determined as a percentage in relation to the colorant mass shall be: antimony ≤ 0.05 %; arsenic ≤ 0.01 %; barium ≤ 0.01 %; cadmium ≤ 0.01 %; chromium (VI) ≤ 0.1 %; lead ≤ 0.01 %; mercury ≤ 0.005 %; selenium ≤ 0.01 %. 2) The mass fraction of other impurities in relation to the colorant mass shall be: primary aromatic amines (expressed as aniline) ≤ 0.05 %.
0001333-86-4	**C.I. Pigment Black 7 (*i.e.* carbon black)**	Toluene extractables: less than 0.1 % determined according to ISO method 6209. UV absorption of cyclohexane extract at 386 nm: < 0.02 AU for a 1 cm cell or < 0.1 AU for a 5 cm cell, determined according to a generally recognized method of analysis. Benzo[a]pyrene content: less than 0.25 mg/kg carbon black. Maximum usage level of carbon black in the polymer: 2.5 % w/w. Shall comply with the colorant purity requirements: 1) The content of metals and metalloids soluble in 0.1 M hydrochloric acid, determined as a percentage in relation to the colorant mass shall be: antimony ≤ 0.05 %; arsenic ≤ 0.01 %; barium ≤ 0.01 %; cadmium ≤ 0.01 %; chromium (VI) ≤ 0.1 %; lead ≤ 0.01 %; mercury ≤ 0.005 %; selenium ≤ 0.01 %. 2) The mass fraction of other impurities in relation to the colorant mass shall be: polychlorinated biphenyls ≤ 0.0025 %; primary aromatic amines (expressed as aniline) ≤ 0.05 %, among which the sum of benzidine, b-naphthylamine and 4-aminobiphenyl shall be ≤ 0.001 %.

7. INDITEX MANUFACTURING POSITIVE LIST FOR FOOD CONTACT MATERIALS MADE OF UNCOATED METALS & ALLOYS

a) Recommended aluminium and aluminium alloys grades

	GRADE DESIGNATION			COMPOSITION												
				% max												% min
	EN 573-3	UNS No	ISO No	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	V	Ti	Others		Al
														Each	Total	
WROUGHT ALLOYS	EN AW-10150A[478]	A91050	Al 99.5	0.25	0.40	0.05	0.05	0.05	-	-	0.07	-	0.05	0.03	-	99.50
	EN AW-1060	A91060	Al 99.6	0.25	0.35	0.05	0.03	0.03	-	-	0.05	0.05	0.03	0.03	-	99.60
	EN AW-1070A[478]	A91070	Al 99.7	0.20	0.25	0.03	0.03	0.03	-	-	0.07	-	0.03	0.03	-	99.70
	EN AW-1100[478]	A91100	Al 99.0 Cu	0.95 (Si + Fe)		0.05 – 0.20	0.05	-	-	-	-	-	-	0.05	0.15	99.00
	EN AW-3003[478]	A93003	AlMn1Cu	0.60	0.70	0.05 – 0.20	1.0-1.5	-	-	-	0.10	-	-	0.05	0.15	Rem
	EN AW-3004	A93004	AlMn1Mg1	0.30	0.7	0.25	1.0-1.5	0.8-1.3	-	-	0.25	-	-	0.05	0.15	Rem
	EN AW-5052	A95052	AlMg2.5	0.25	0.40	0.10	0.10	2.20-2.80	0.15-0.35	-	0.10	-	-	0.05	0.15	Rem
	EN AW- 5154A	-	AlMg3.5	0.50	0.50	0.10	0.50	3.1-3.9	0.25	-	0.20	-	0.20	0.05	0.15	Rem
	EN AW- 5182	A95182	-	0.20	0.35	0.15	0.20-0.50	4.0-0.50	0.10	-	0.25	-	0.10	0.05	0.15	Rem

478 Standard for articles manufactured by impact extrusion slugs, such as water bottles.

	GRADE DESIGNATION			COMPOSITION												
				% max												% min
	EN 1706	UNS No	ISO No	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Others	Al
															Each / Total	
CASTING ALLOYS	Al99.6E	-	-	0.1	0.3	0.01	0.007	0.02	0.005	-	0.04	-	-	-	0.03 / -	99.6
	Al99.7E	-	-	0.07	0.2	0.01	0.005	0.02	0.004	-	0.04	-	-	-	0.03 / -	99.7
	EN AC-41000	-	Al Si2MgTi	1.6 -2.4	0.6	0.1	0.3-0.5	0.45-0.65	-	0.05	0.10	-	-	0.05-0.2	0.05 / 0.15	Rem
	EN AC-42000	A03560	Al Si7Mg	6.5-7.5	0.55	0.2	0.35	0.2-0.65	-	0.15	0.15	-	-	0.25	0.05 / 0.15	Rem
	EN AC-42100	A13560	Al Si7Mg0.3	6.5-7.5	0.19	0.05	0.1	0.2-0.45	-	-	0.07	-	-	0.25	0.03 / 0.10	Rem
	EN AC-42200	A03570	Al Si7Mg0.6	6.5-7.5	0.19	0.05	0.1	0.45-0.70	-	-	0.07	-	-	0.25	0.03 / 0.10	Rem
	EN AC-43000	-	Al Si10Mg	9.0-11.0	0.55	0.05	0.45	0.20-0.45	-	0.05	0.10	0.05	0.05	0.15	0.05 / 0.15	Rem
	EN AC-43100	-	Al Si10Mg	9.0-11.0	0.55	0.10	0.45	0.20-0.45	-	0.05	0.10	0.05	0.05	0.15	0.05 / 0.15	Rem
	EN AC-43300	-	Al Si9Mg	9.0-10.0	0.19	0.05	0.10	0.20-0.45	-	-	0.07	-	-	0.15	0.03 / 0.10	Rem
	EN AC-43500	-	-	9.0-11.5	0.25	0.05	0.40-0.80	0.10-0.60	-	-	0.07	-	-	0.20	0.05 / 0.15	Rem
	EN AC-44000	-	Al Si11	10.0-11.8	0.19	0.05	0.10	0.45	-	-	0.07	-	-	0.15	0.03 / 0.10	Rem
	EN AC-44200	-	Al Si12 (a)	10.5-13.5	0.55	0.05	0.35	-	-	-	0.10	-	-	0.15	0.05 / 0.15	Rem
	EN AC-44300	A14130	Al Si12 (Fe)	10.5-13.5	1.0	0.10	0.55	-	-	-	0.15	-	-	0.15	0.05 / 0.25	Rem
	EN AC-44400	-	Al Si9	8.0-11.0	0.65	0.10	0.50	0.10	-	0.05	0.15	0.05	0.05	0.15	0.05 / 0.15	Rem
	EN AC-51100	-	-	0.55	0.55	0.05	0.45	2.5 - 3.5	-	-	0.10	-	-	0.20	0.05 / 0.15	Rem
	EN AC-51300	-	Al Mg5	0.55	0.55	0.10	0.45	4.5-6.5	-	-	0.10	-	-	0.20	0.05 / 0.15	Rem
	EN AC-51400	-	Al Mg5(Si)	1.5	0.55	0.05	0.45	4.5-6.5	-	-	0.10	-	-	0.20	0.05 / 0.15	Rem
	EN AC-51500	-	-	1.8-2.6	0.25	0.05	0.4 - 0.8	4.7-6.0	-	-	0.07	-	-	0.25	0.05 / 0.15	Rem

b) Permitted stainless steel grades

	GRADE DESIGNATION				COMPOSITION									
	UNS	AISI/ ASTM	GB	EN	C (max)	Cr	Mn (max)	P (max)	S (max)	N (max)	Si (max)	Mo	Ni	Others
FERRITIC	S43000	430	S11710	1.4016	0.08	16 - 18	1.0	0.040	0.015	–	1.00	–	–	–
	S43035	439	S11863	1.4510	0.05	16 - 18	1.0	0.040	0.015	–	1.00	–	–	Ti: 4x (C+N)+0.15 to 0.8
	S44400	444	S11972	1.4521	0.025	17 - 20	1.0	0.040	0.015	0.03	1.00	1.8 - 2.5	–	Ti: 4x (C+N)+0.15 to 0.8
MARTENSITIC[479]	S41000	410	S41010	1.4006	0.08 - 0.15	11.5 - 13.5	1.5	0.040	0.015		1.00	–	< 0.75	–
	S42000	420	S42020	1.4021	0.16 - 0.25	13 - 14	1.5	0.040	0.015	–	1.00	–	–	–
	S42000	420	S42030	1.4028	0.26 - 0.35	13 - 14	1.5	0.040	0.015	–	1.00	–	–	–
	S42000	420	S42040	1.4031	0.36 - 0.42	13 - 14.5	1.0	0.040	0.015	–	1.00	–	–	–
	S43100	431	S43120	1.4057	0.16 - 0.22	15 - 17	1.0	0.040	0.015	–	1.00	–	1 - 2.5	–
AUSTENITIC	S30200	302	S30210	1.4325	0.04 - 0.15	17 - 19	2	0.045	0.030	0.11	1.00	–	8 – 10	–
	S30100	301	S30110	1.4310	0.05 - 0.15	16 - 19	2	0.045	0.015	0.11	2	< 0.8	6 - 9.5	0.05 – 0.15
	S30403	304L	S30403	1.4307	0.03	17.5 - 19.5	2	0.045	0.015	0.11	1.00	–	8 – 10.5	–
	S30403	304L	S30403	1.4306	0.03	18 - 20	2	0.045	0.015	0.11	1.00	–	10 – 12	–
	S30400	304	S30408	1.4301	0.07	17.5 - 19.5	2	0.045	0.015	0.11	1.00	–	8 – 10.5	–
	S32100	321	S32168	1.4541	0.08	17 - 19	2	0.045	0.015	–	1.00	–	9- 12	Ti:5 x C to 0,70
	S34700	347	S34778	1.4550	0.08	17 - 19	2	0.045	0.015	–	1.00	–	9 - 12	Nb: 10x C to 1.00
	S30500	305	S30510	1.4303	0.06	17 - 19	2	0.045	0.015	0.11	1.00	–	11- 13	–
	S31603	316L	S31603	1.4404	0.03	16.5 - 18.5	2	0.045	0.015	–	1.00	2 - 2.5	10- 13	–
	S31600	316	S31608	1.4401	0.07	16.5 - 18.5	2	0.045	0.015	0.11	1.00	2 - 2.5	10 - 13	–
	S31603	316L	S31603	1.4432	0.03	16.5 - 18.5	2	0.045	0.015	0.11	1.00	2.5 - 3	10.5 - 13	–
	S31600	316	S31608	1.4436	0.05	16.5 - 18.5	2	0.045	0.015	0.11	1.00	2.5 - 3	10.5 - 13	–
	S20200	202	S35450	1.4373	0.15	17 - 19	2	0.045	0.015	0.05- 0.25	1.00	–	4 - 6	–

479 For the whole knife: min 0.26 % C.

8. INDITEX MANUFACTURING POSITIVE LIST FOR FOOD CONTACT MATERIALS WITH NATURAL COATINGS

a) WAXES

Type of wax	E No	CAS No
Beeswax	E 901	8012-89-3
Candelilla wax	E 902	8006-44-8
Carnauba wax	E 903	8015-86-9
Microcrystalline wax	E 905	63231-60-7
Montan acid esters	E 912	8002-53-7

b) OILS

Type of oil	
Edible vegetable oil[480]	Olive oil
	Safflower oil
	Peanut oil
	Soybeen oil
	Sunflower oil
	Rapeseed oil
	Grapeseed oil
	Corn oil
	Cotton seed oil
	Almond oil
	Hazelnut
	Wallnut oil
	Wheat germ oil
	Sesame oil
	Coconut oil
	Palm oil
	Pumpking seed oil
	Hempseed oil
	Poppy seed oil
	Rice bran oil

480 The vegetable oils included in this table must be food grade and comply with the quality and purity requirements specified in the applicable food regulations.

9. GROUP RESTRICTION OF SUBSTANCES FOR PLASTIC MATERIALS

The following table on Group restrictions contains the following information:

SML(T) Group No: contains the identification number of the group of substances for which the group restriction applies.

SML(T) [mg/kg]: contains the total specific migration limit for the sum of substances applicable to this group. It is expressed in mg substance per kg food. It is indicated nd if the substance shall not migrate in detectable quantities.

Group restriction specification: contains an indication of the substance whose molecular weight forms the basis for expression of the result.

Group restriction of substances				
SML(T) Group No.	CAS No.	Substance name	SML(T) [mg/kg]	Group restriction specification
1	0000075-07-0	Acetaldehyde	6	Expressed as acetaldehyde
	0000105-38-4	Propionic acid, vinyl ester		
2	-	Stearic acid, esters with ethyleneglycol	30	Expressed as ethyleneglycol
	0000107-21-1	Ethyleneglycol		
	0000111-46-6	Diethyleneglycol		
	0000624-03-3	Ethylene glycol dipalmitate		
3	0000108-31-6	Maleic anhydride	30	Expressed as maleic acid
	0000110-16-7	Maleic acid		
4	0000105-60-2	Caprolactam	15	Expressed as caprolactam
	0002123-24-2	Caprolactam, sodium salt		
5	0000077-62-3	2,2′-Methylenebis(4-methyl-6-(1-methylcyclohexyl) phenol)	3	Expressed as the sum of the substances
	0004066-02-8	2,2′-Methylenebis(4-methyl-6-cyclohexylphenol)		
6	0001335-23-5	Copper iodide	1	Expressed as iodine
	0007681-11-0	Potassium iodide		
	0007681-82-5	Sodium iodide		
	0010377-51-2	Lithium iodide		
7	-	N,N-bis(2-hydroxyethyl)alkyl (C8-C18)amine	1.2	Expressed as tertiary amine
	-	N,N-bis(2-hydroxyethyl)alkyl (C8-C18)amine hydrochlorides		

Continued on next page

Group restriction of substances				
SML(T) Group No.	**CAS No.**	**Substance name**	**SML(T) [mg/kg]**	**Group restriction specification**
8	0000131-53-3	2,2′-Dihydroxy-4-methoxybenzophenone	6	Expressed as the sum of the substances
	0000131-56-6	2,4-Dihydroxybenzophenone		
	0000131-57-7	2-Hydroxy-4-methoxybenzophenone		
	0000611-99-4	4,4′-Dihydroxybenzophenone		
	0001843-05-6	2-Hydroxy-4-n-octyloxybenzophenone		
	0003293-97-8	2-Hydroxy-4-n-hexyloxybenzophenone		
9	0026636-01-1	Dimethyltin bis(isooctyl mercaptoacetate)	0.18	Expressed as tin
	0054849-38-6	Monomethyltin tris(isooctyl mercaptoacetate)		
	0057583-34-3	Monomethyltin tris(ethylhexyl mercaptoacetate)		
	0057583-35-4	Dimethyltin bis(ethylhexyl mercaptoacetate)		
	0068442-12-6	Reaction products of oleic acid, 2- mercaptoethyl ester, with dichlorodimethyltin, sodium sulphide and trichloromethyltin		
10	-	Di-n-octyltin bis(n-alkyl(C10-C16) mercaptoacetate)	0.006	Expressed as tin
	-	Di-n-octyltin bis(ethyl maleate)		
	-	Di-n-octyltin 1,4-butanediol bis(mercaptoacetate)		
	-	Di-n-octyltin dimaleate, esterified		
	-	Di-n-octyltin dimaleate, polymers (n=2-4)		
	-	Di-n-octyltin thiobenzoate 2-ethylhexyl mercaptoacetate		
	0003648-18-8	Di-n-octyltin dilaurate		
	0010039-33-5	Di-n-octyltin bis(2-ethylhexyl maleate)		
	0015535-79-2	Di-n-octyltin mercaptoacetate		
	0015571-58-1	Di-n-octyltin bis(2-ethylhexyl mercaptoacetate)		
	0015571-60-5	Di-n-octyltin dimaleate		
	0026401-97-8	Di-n-octyltin bis(isooctyl mercaptoacetate)		
	0033568-99-9	Di-n-octyltin bis(isooctyl maleate)		
	0069226-44-4	Di-n-octyltin ethyleneglycol bis(mercaptoacetate)		

Continued on next page

Group restriction of substances				
SML(T) Group No.	**CAS No.**	**Substance name**	**SML(T) [mg/kg]**	**Group restriction specification**
11	-	Mono-n-octyltin tris(alkyl (C10-C16) mercaptoacetate)	1.2	Expressed as tin
	0026401-86-5	Mono-n-octyltin tris(isooctyl mercaptoacetate)		
	0027107-89-7	Mono-n-octyltin tris(2-ethylhexyl mercaptoacetate)		
12	0002440-22-4	2-(2′-Hydroxy-5′-methylphenyl)benzotriazole	30	Expressed as the sum of the substances
	0003864-99-1	2-(2′-Hydroxy-3,5′-di-tert-butylphenyl)-5-chlorobenzotriazole		
	0003896-11-5	2-(2′-Hydroxy-3′-tert-butyl-5′-methylphenyl)-5-chlorobenzotriazole		
13	0000088-24-4	2,2′-Methylene bis(4-ethyl-6-tert- butylphenol)	1.5	Expressed as the sum of the substances
	0000119-47-1	2,2′-Methylene bis(4-methyl-6-tert-butylphenol)		
14	0000123-28-4	Thiodipropionic acid, didodecyl ester	5	Expressed as the sum of the substances and their oxidation products
	0000693-36-7	Thiodipropionic acid, dioctadecyl ester		
	0016545-54-3	Thiodipropionic acid, ditetradecyl ester		
15	0000050-00-0	Formaldehyde	15	Expressed as formaldehyde
	0000100-97-0	Hexamethylenetetramine		
	0000505-65-7	1,4-Butanediol formal		
16	0001330-43-4	Sodium tetraborate	6	Expressed as boron, without prejudice to the provisions of Directive 98/83/EC
	0010043-11-5	Boron nitride		
	0010043-35-3	Boric acid		
	0012007-55-5	Barium tetraborate		

Continued on next page

Group restriction of substances				
SML(T) Group No.	**CAS No.**	**Substance name**	**SML(T) [mg/kg]**	**Group restriction specification**
17	-	Mixture of (40 % w/w) 2,2,4-trimethylhexane-1,6-diisocyanate and (60 % w/w) 2,4,4-trimethylhexane-1,6-diisocyanate	nd	Expressed as isocyanate moiety
	0000091-08-7	2,6-Toluene diisocyanate		
	0000091-97-4	3,3′-Dimethyl-4,4′-diisocyanatobiphenyl		
	0000101-68-8	Diphenylmethane-4,4′-diisocyanate		
	0000112-96-9	Octadecyl isocyanate		
	0000584-84-9	2,4-Toluene diisocyanate		
	0000822-06-0	Hexamethylene diisocyanate		
	0003173-53-3	Cyclohexyl isocyanate		
	0003173-72-6	1,5-Naphthalene diisocyanate		
	0004098-71-9	1-Isocyanato-3-isocyanatomethyl-3,5,5-trimethylcyclohexane		
	0004128-73-8	Diphenylether-4,4′-diisocyanate		
	0005124-30-1	Dicyclohexylmethane-4,4′-diisocyanate		
	0005873-54-1	Diphenylmethane-2,4′-diisocyanate		
	0026747-90-0	2,4-Toluene diisocyanate dimer		
18	0061788-89-4	Acids, fatty, unsaturated (C18), dimers, non hydrogenated, distilled and non-distilled	0.05	Expressed as the sum of the substances
	0068783-41-5	Acids, fatty, unsaturated (C18), dimers, hydrogenated, distilled and non-distilled		
19	0007631-90-5	Sodium bisulphite	10	Expressed as SO_2
	0007757-83-7	Sodium sulphite		
	0007772-98-7	Sodium thiosulphate		
20	0000121-79-9	Gallic acid, propyl ester	30	Expressed as the sum of the substances
	0001034-01-1	Gallic acid, octyl ester		
	0001166-52-5	Gallic acid, dodecyl ester		

Continued on next page

Group restriction of substances				
SML(T) Group No.	CAS No.	Substance name	SML(T) [mg/kg]	Group restriction specification
21	0000528-44-9	Trimellitic acid	5	Expressed as trimellitic acid
	0000552-30-7	Trimellitic anhydride		
22	-	Polyacrylic acid, salts	6	Expressed as acrylic acid
	0000079-10-7	Acrylic acid		
	0000096-33-3	Acrylic acid, methyl ester		
	0000106-63-8	Acrylic acid, isobutyl ester		
	0000140-88-5	Acrylic acid, ethyl ester		
	0000141-32-2	Acrylic acid, n-butyl ester		
	0000689-12-3	Acrylic acid, isopropyl ester		
	0000818-61-1	Acrylic acid, monoester with ethyleneglycol		
	0000925-60-0	Acrylic acid, propyl ester		
	0001663-39-4	Acrylic acid, tert-butyl ester		
	0002495-35-4	Acrylic acid, benzyl ester		
	0002499-59-4	Acrylic acid, n-octyl ester		
	0002998-08-5	Acrylic acid, sec-butyl ester		
	0025134-51-4	Acrylic acid, acrylic acid, 2-ethylhexyl ester, copolymer		

Continued on next page

Group restriction of substances				
SML(T) Group No.	**CAS No.**	**Substance name**	**SML(T) [mg/kg]**	**Group restriction specification**
23	0000079-41-4	Methacrylic acid	6	Expressed as methacrylic acid
	0000080-62-6	Methacrylic acid, methyl ester		
	0000097-63-2	Methacrylic acid, ethyl ester		
	0000097-86-9	Methacrylic acid, isobutyl ester		
	0000097-88-1	Methacrylic acid, butyl ester		
	0000585-07-9	Methacrylic acid, tert-butyl ester		
	0000760-93-0	Methacrylic anhydride		
	0000868-77-9	Methacrylic acid, monoester with ethyleneglycol		
	0002177-70-0	Methacrylic acid, phenyl ester		
	0002210-28-8	Methacrylic acid, propyl ester		
	0002495-37-6	Methacrylic acid, benzyl ester		
	0002998-18-7	Methacrylic acid, sec-butyl ester		
	0004655-34-9	Methacrylic acid, isopropyl ester		
24	0110553-27-0	2,4-Bis(octylthiomethyl)-6-methylphenol	5	Expressed as the sum of the substances
	0110675-26-8	2,4-Bis(dodecylthiomethyl)-6- methylphenol		
25	0067649-65-4	Mono-n-dodecyltin tris(isooctyl mercaptoacetate)	0.05	Sum of mono-n-dodecyltin tris(isooctylmercaptoacetate), di-n- dodecyltin bis(isooctyl mercaptoacetate), mono-dodecyltin trichloride and di-dodecyltin dichloride) expressed as the sum of mono- and di-dodecyltin chloride
	0084030-61-5	Di-n-dodecyltin bis(isooctyl mercaptoacetate)		
26	0068515-48-0 / 0028553-12-0	Phthalic acid, diesters with primary, saturated C8-C10 branched alcohols, more than 60 % C9	9	Expressed as the sum of the substances
	0068515-49-1/ 0026761-40-0	Phthalic acid, diesters with primary, saturated C9-C11 alcohols more than 90 % C10		

Continued on next page

Group restriction of substances				
SML(T) Group No.	**CAS No.**	**Substance name**	**SML(T) [mg/kg]**	**Group restriction specification**
27	0000099-63-8	Isophthalic acid dichloride	5	Expressed as isophthalic acid
	0000121-91-5	Isophthalic acid		
28	0000100-20-9	Terephthalic acid dichloride	7.5	Expressed as terephthalic acid
	-	Phthalic acid		
	0000100-21-0	Terephthalic acid		
29	0000502-44-3	Caprolactone	0.05	Expressed as the sum of 6-hydroxyhexanoic acid and caprolactone
	0031831-53-5	Polyester of 1,4-butanediol with caprolactone		
30	0000110-63-4	1,4-Butanediol	5	Expressed as 1,4-butanediol
	0031831-53-5	Polyester of 1,4-butanediol with caprolactone		
	0000505-65-7	1,4-Butanediol formal		
31	-	Polyesters of 1,2-propanediol and/ or 1,3- and/or 1,4-butanediol and/ or polypropyleneglycol with adipic acid, which may be end-capped with acetic acid or fatty acids C12-C18 or n-octanol and/or n-decanol	30	Expressed as the sum of the substances
	0073018-26-5	Polyester of adipic acid with 1,3-butanediol, 1,2-propanediol and 2-ethyl-1-hexanol		

Continued on next page

Group restriction of substances				
SML(T) Group No.	CAS No.	Substance name	SML(T) [mg/kg]	Group restriction specification
32	-	Acetylated mono- and diglycerides of fatty acids	60	Expressed as the sum of the substances
	-	Polyester of adipic acid with glycerol or pentaerythritol, esters with even numbered, unbranched C12-C22 fatty acids		
	-	Polyesters of 1,2-propanediol and/ or 1,3- and/or 1,4-butanediol and/ or polypropyleneglycol with adipic acid, which may be end- capped with acetic acid or fatty acids C12-C18 or n-octanol and/or n-decanol		
	0000077-90-7	Tri-n-butyl acetyl citrate		
	0000077-93-0	Citric acid, triethyl ester		
	0000084-74-2	Phthalic acid, dibutyl ester		
	0000085-68-7	Phthalic acid, benzyl butyl ester		
	0000103-23-1	Adipic acid, bis(2-ethylhexyl) ester		
	0000109-43-3	Sebacic acid, dibutyl ester		
	0000117-81-7	Phthalic acid, bis(2-ethylhexyl) ester		
	0008013-07-8	Soybean oil, epoxidised		
	0030899-62-8	Glycerol monolaurate diacetate		
	0068515-48-0 / 0028553-12-0	Phthalic acid, diesters with primary, saturated C8-C10 branched alcohols, more than 60 % C9		
	0068515-49-1 / 0026761-40-0	Phthalic acid, diesters with primary, saturated C9-C11 alcohols more than 90 % C10		
	0166412-78-8	1,2-Cyclohexanedicarboxylic acid, diisononyl ester		
	0736150-63-3	Glycerides, castor-oil mono-, hydrogenated, acetates		
	0073018-26-5	Polyester of adipic acid with 1,3-butanediol, 1,2-propanediol and 2-ethyl-1-hexanol		
	0006422-86-2	Terephthalic acid, bis(2-ethylhexyl)ester		
	-	Neopentyl glycol, diesters and monoesters with benzoic acid and 2-ethylhexanoic acid		
	-	Trimethylolpropane, mixed triesters and diesters with benzoic acid and 2-ethylhexanoic acid		

10. INGREDIENTS NOTIFICATION

a) Ingredients notification template for food contact materials made of plastic

INGREDIENT LIST

[FACTORY LOGO / STAMP]

1. Manufacturer:
2. Food contact product name:
3. Date:
4. Chemical composition of the food contact product:

Hereby we declare that the composition of the articles listed in point 2 is as follows:

Type of chemical substance	Chemical substance	CAS Number
Polymers		
Monomers		
Additives (i.e. harderners or acelerators, curing agents, stabilizers, fillers, lubricants, release agents and other additives)		
Dyes, pigments and other coloring agents		

We guarantee that above statement is true and accurate. If any false, we are willing to bear responsibility.

[FACTORY RESPONSIBLE SIGNATURE]

b) Ingredients notification template for food contact materials made of silicone

INGREDIENT LIST

[FACTORY LOGO / STAMP]

1. Manufacturer:
2. Food contact product name:
3. Date:
4. Chemical composition of the food contact product:

Hereby we declare that the composition of the articles listed in point 2 is as follows:

Type of chemical substance	Chemical substance	CAS Number
Starting materials		
Monomers		
Additives (i.e. harderners or acelerators, curing agents, stabilizers, fillers, lubricants, release agents and other additives)		
Dyes, pigments and other coloring agents		

We guarantee that above statement is true and accurate. If any false, we are willing to bear responsibility.

[FACTORY RESPONSIBLE SIGNATURE]

c) Example of ingredients notification

INGREDIENT LIST

M Co Ltd

1. Manufacturer: M Co Ltd
2. Food contact product name: Melamine bowl
3. Date: 07/03/2019
4. Chemical composition of the food contact product:

Hereby we declare that the composition of the articles listed in point 2 is as follows:

Type of chemical substance	Chemical substance	CAS Number
Polymers	Melamine formaldehyde resin	–
Monomers	1,3,5-triazine-2,4,6-triamine (*i. e.* melamine)	0000108-78-1
	Formaldehyde	0000050-00-0
Additives (i.e. harderners or acelerators, curing agents, stabilizers, fillers, lubricants, release agents and other additives)	Cellulose	0009004-34-6
	Titanium dioxide	0013463-67-7 / 0001317-80-2
	Calcium carbonate	0000471-34-1
	Ammonium lactate	0000515-98-0
Dyes, pigments and other coloring agents	C.I. Pigment orange 79	0250640-08-5
	C.I. Pigment White 6 / titanium dioxide	0013463-67-7 / 0001317-80-2

We guarantee that above statement is true and accurate. If any false, we are willing to bear responsibility.

M Co Ltd RP

ANNEX III. DEFINITIONS

1. GENERAL

Additive

A substance which is intentionally added to a food contact material to achieve a physical or chemical effect during processing of the material or in the final material or article and it is intended to be present in the final material or article.

CAS Number

Single and unique numerical identifiers to every chemical substance. INDITEX Manufacturing Positive List focuses on chemical substances listed by chemical name and/or CAS number; however, it also includes groups of substances for which listing individual substances is not practical. These groups of substances do not have an associated CAS Number.

Chemical Substance

A chemical substance is a chemical element and its compounds in the natural state or obtained by any manufacturing process.

Colorant

A substance which is intentionally added to food contact materials to confer colour to the material or in the final article; it is intended to be present in the final material or article.

Food contact article or product

Articles which in their finished stated are intended to be brought into contact with food; or are already in contact with food and were intended for that purpose; or can reasonably be expected to be brought into contact with food or to transfer their constituents to food under normal or foreseeable conditions of use.

Food Contact Material (FCM)

Materials used in the manufacture of food contact articles or products.

Food simulant

A test medium imitating food; in its behavior the food simulant mimics migration from food contact materials.

Maximum residue quantity (QMA)

The maximum allowable quantity of certain kind or type of residue in food contact materials and their products, expressed by the amount of residue (in milligram) in each kilogram of food contact materials and their products (mg/kg) or by the amount of residue (in milligram) in each square decimeter of contact area between food contact materials/their products and foods (mg/dm^2).

Monomer (or starting substance)

A substance undergoing:

any type of polymerization process to manufacture polymers; or

a natural or synthetic macromolecular substance used in the manufacture of modified macromolecules; or

a substance used to modify existing natural or synthetic macromolecules.

No detection (nd)

The analyzed target substance shall not be detected. For the purposes of this Manufacturing Positive List, unless specific detection limits have been set for particular substances or groups of substances, a detection limit of 0.01 mg/kg shall apply.

Plastic

Polymeric material to which additives or other substances may have been added, which is capable of functioning as a main structural component of final materials and articles.

Polymer

Any macromolecular substance obtained by:

– a polymerization process such as polyaddition or polycondensation, or by any other similar process of monomers and other starting substances; or

– chemical modification of natural or synthetic macromolecules; or

– microbial fermentation.

Polymer production aid

Any substance used to provide a suitable medium for polymer manufacturing; it may be present but is neither intended to be present in the final materials or articles nor has a physical or chemical effect in the final material or article.

Positive list

List of permitted chemical substances to be used in the manufacture food contact products.

Restriction

Limitation of use of a substance or migration limit or limit of content of the substance in the material or article.

Silicone resins

Silicone resins are materials formed by branched oligosiloxanes with the general formula of $R_nSiX_mO_y$, where R is a non-reactive substituent. Silicone resins represent a broad range of products and are very useful in pressure-sensitive adhesives, silicone rubbers, coatings and additives.

Specification

Composition of a substance, purity criteria for a substance, physicochemical characteristics of a substance, details concerning the manufacturing process of a substance or further information concerning the expression of migration limits.

Specific migration limit (SML)

The maximum permitted amount of a given substance released from a material or article into food or food simulants.

Total specific migration [SML(T)]

The maximum permitted sum of particular substances released in food or food simulants expressed as total of moiety of the substances indicated.

2. FOOD CONTACT PRODUCTS MADE OF RUBBER / SILICON RUBBER

Nursing utensils

Rubber and silicone rubber products and articles intended to be taken into the mouth of infants or toddlers, as well as articles intended to come into contact with baby foodstuffs (*e.g.* dummies, teats, etc.).

Rubber

Material constituted of natural rubber, synthetic rubber (including vulcanized thermoplastic elastomers) as well as blends or rubber with plastics and other materials, showing the property of high elasticity. Rubber materials are based on elastomers which are understood to be macromolecular natural and synthetic materials which at temperatures between 18ºC and 29ºC restore their shape quickly and vigorously after having been subjected to a strong deforming power, as soon as the operation of the force ceases.

Natural rubber

Material formed by an amorphous polymer consisting essentially of cis -1-2-polyisoprene, which is generally obtained from the sap (latex) of the botanical source Hevea brasiliensis.

Synthetic rubber

Artificially manufactured elastomers (including vulcanized thermoplastic elastomers) obtained through the polymerization of monomers, to which different types of additives are added.

Thermoplastic elastomers (TPE)

TPE, sometimes referred as thermoplastic rubbers, are a class of polymers or blend of polymers that may or may not require vulcanisation or cross linking during processing, yet has properties, at its service temperature, similar to those of vulcanised rubber, these properties disappear at processing temperature, so that further processing is possible, but return when the material is returned to its service temperature.

Silicone Rubber

Silicone rubber is an elastomer formed by polysiloxane base polymers, silica and other substances under the condition of heating and pressurization.

3. FOOD CONTACT PRODUCTS MADE OF CERAMIC AND/OR GLASS: GENERAL DEFINITIONS

Ceramic

Mixture of inorganic materials with high silicon oxide and complex silicates content such as kaolin, clays, feldspars and others to which small quantities of organic materials may have been added. Ceramic articles are first shaped and then the shape thus obtained is permanently fixed by thermal treatment at high temperatures. The surface can be glazed or enamelled and/or decorated. Ceramic ware can be classified into earthenware (clay pottery), stone-ware and porcelain, among others, according to their composition and degree of vitrification –evidenced by the water absorption capacity–.

Glaze (enamel)

Vitreous coating obtained by fusion and subsequent hardening of powdered inorganic oxides onto a substrate made of ceramic, glass or metal by firing. Both expressions, glaze and enamel, are equally applied to vitreous finish obtained by heat treatment.

Glass

Inorganic material produced by the complete fusion of raw materials at high temperature into a homogeneous liquid which is then cooled to a rigid condition, essentially without crystallization. Glass articles are manufactured from soda-lime-silica, borosilicate or lead crystal glass or from glass ceramic.

Crystal (lead crystal glass)

A variety of glass materials, which as described in directive ECC 69/493, are defined as follows:

– **Full lead crystal:** silicate glass containing 30 % or more of lead oxide;

– **Lead crystal:** silicate glass containing 24 % or more of lead oxide;

– **Crystalline:** silicate glass containing zinc oxide, barium oxide, lead oxide and potassium oxide; one of these oxides or the sum of all the oxides have to be 10 % or more.

Moreover, depending on the abovementioned compositions, the article shall comply with the density, refractive index and hardness requirements specified in the mentioned directive.

4. FOOD CONTACT PRODUCTS MADE OF CERAMIC AND/OR GLASS: TYPE OF PRODUCT

Europe

Council Directive of 15 October 1984 on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs:

Category 1: articles which cannot be filled and articles which can be filled, the internal depth of which, measured from the lowest point to the horizontal plane passing through the upper rim, does not exceed 25 mm.

Category 2: all other articles that can be filled and do not fall under category 1 or 3.

Category 3: packaging and storage vessels having a capacity of more than three litres.

Drinking rim: 20 mm wide section of the external surface of a drinking vessel, measured downwards from the upper edge along the wall of the vessel.

China

GB 4806.3 National Food Safety Standard for Enamel Products; GB 4806.4 National Food Safety Standard for Ceramic Products and GB 4806.4 National Food Safety Standard for Glassware:

Flatware: ceramic ware with a depth from the lip rim to the lowest point of the bottom of less than or equal to 25 mm.

Hollowware: ceramic ware with a depth from the lip rim to the lowest point of the bottom of more than 25 mm. According to its volume, the hollowware category is divided into following groups:

– **Large Hollowware**: Hollow articles with volume greater than or equal to 1.1 L but less than 3 L.

– **Small Hollowware (other than cups)**: Hollow articles with volume less than 1.1 L.

Cup: Hollowware articles used for holding water or beverage in daily life.

Storage Pitcher: Hollowware articles with volume greater than or equal to 3 L.

Mouth edge: The marginal area within 20 mm from the mouth of the glassware in direct contact with the lips and having external decoration.

USA

– CPG Sec. 545.400 Pottery (Ceramics); Import and Domestic - Cadmium Contamination:

Flatware: ceramic articles which have an internal depth, as measured from the lowest point to the horizontal plane passing through the upper rim, that does not exceed 25 mm.

Hollowware: ceramic articles which have an internal depth, as measured from the lowest point to the horizontal plane passing through the upper rim, greater than 25 mm.

Small hollowware: with capacity of less than 1.1 litre.

Large hollowware: with capacity of 1.1 litre or more.

Lip and rim: that part of a drinking vessel that extends 20 mm below the rim on the outside of the specimen.

– CPG Sec. 545.450 Pottery (Ceramics); Import and Domestic - Lead Contamination:

Flatware: ceramic articles which have an internal depth as measured from the lowest point to the horizontal plane passing through the upper rim, which does not exceed 25 mm.

Hollowware: ceramic articles that have an internal depth measured from the lowest point to the horizontal plane passing through the upper rim, greater than 25 mm.

Small hollowware: with capacity of less than 1.1 litre.

Large hollowware: with capacity of 1.1 litre or more.

Cups and mugs: small ceramic hollowware vessels commonly used for consumption of beverages, for example, coffee or tea at above room temperature. Cups and mugs normally, but not exclusively, have a capacity of about 240 mL or 8 fl. oz. and are manufactured with a handle. Cups normally have a base and curved sides while a mug has cylindrical sides.

Pitchers: large ceramic hollowware vessels (sometimes known as jugs) commonly used for the storage and dispensing of fruit and vegetable juices or other acidic beverages at or below room temperature which are normally manufactured without a lid but with a handle and lip spout. For the purpose of this guideline, creamers, coffeepots, and teapots are not considered to be pitchers. Depending on capacity, creamers, coffeepots and teapots will be considered small or large hollowware.

5. FOOD CONTACT PRODUCTS MADE OF WOOD AND OTHER NATURAL PRODUCTS

Natural material

Natural material is any product or physical matter that comes from natural sources, such as plants, animals, or minerals or stones. In this chapter we will include those natural materials not mentioned in other chapters of this Standard such as stone, cork, etc.

Natural wood

Hard fibrous material that forms the main substance of the trunk or branches of a tree or shrub, used for timber. For the purposes of this Standard, bamboo is considered a timber species.

Natural cork

Impermeable buoyant material, primarily taken from Quercus suber (*i.e.* cork oak) bark, without any organic coating on the surface or synthetic resin used as a glue.

Cork stopper

Stoppers which are processed by one or several corks or accumulating granulated cork and are used for blocking bottles or other containers.

Cork article

Articles which are made of cork and remain the basic characteristics of cork after being processed by mechanical or chemical method.

6. FOOD CONTACT PRODUCTS MADE WITH ORGANIC COATINGS

Organic coating

Finished material prepared mainly from a complex mixture of polymer(s), fluid carriers, pigments and additives applied to form a layer/film on a substrate in such a way as to create a protective layer and/or to impart technical performance.

Natural coating

Oil and/or wax finishes used to protect and preserve the surface of substrates such as natural wood.

7. FOOD CONTACT PRODUCTS MADE WITH PORCELAIN ENAMEL AND OTHER INORGANIC COATINGS

Porcelain enamel or vitreous enamel ware

Metallic articles manufactured with a glazed surface finish produced by the application of a powdered inorganic glass, dry or suspended in water, on the metal surface and its subsequent fusion.

Food contact materials with porcelain enamel coatings: type of product

Refer to definitions specified in section 3 of this chapter (*i.e.* Food contact products made of ceramic and/or glass: type of product).

Metallic coating

Layer/film made of metals and/or alloys applied on a substrate to create a protective layer and/or to impart technical performance. Metallic coatings are deposited by electroplating and physical vapor deposition (PVD), among other processes.

Electroplating

Electro deposition process used for producing dense, uniform, and adherent metallic coatings by the act of electric current. Coatings applied through electroplating processes can have decorative and/or protective purposes, as well as enhance specific properties of the surface. The electroplated surfaces can be conductors (e.g. metallic surfaces) or non-conductors (e.g. plastic substrates).

PVD (Physical vapor deposition)

Physical vapour deposition (PVD) processes are atomistic deposition processes in which a material is vaporized from a solid or liquid source in the form of atoms or molecules and transported in the form of a vapour through a vacuum or low pressure gaseous (or plasma) environment to a substrate, where it condenses forming a thin film.

8. FOOD CONTACT PRODUCTS MADE OF TEXTILE

Textiles made of synthetic fibres

Synthetic fibres are made of polymer-based materials made by chemical synthesis such as polyamide, polypropylene, polyester, and others.[481]

Textiles made of artificial fibres

Fibres are obtained form natural polymers after being subjected to different industrial processes. An example of this type of textile fibres is rayon, which is made from regenerated cellulose.

Textiles made of natural fibres

Textiles made of natural fibres, are those made of fibres produced by natural sources such as cotton, linen and rattan, are also used as food contact products. These fibres are provided by nature in ready-made form.

481 To check the plastic base materials used to manufacture synthetic fibres, see Chapter IV. A.

9. CHILDREN'S TABLEWARE

Children's Tableware

Children's Tableware means any tableware product intended to use by a child aged up to 36 months such as cutlery, feeding utensils and drinking equipment.

Children's Cutlery

Implements used for eating such as knives, forks, spoons and food pushers, which are intended to be used by a child aged up to 36 months to eat by itself or with the assistance of another person are included in the scope of this document.

Children's Feeding utensils

Implements or containers used for eating or feeding children such plates and bowls.

Container

Feeding bottle, drinking cup or feeding bag.

Detachable protective cover

Cover or parts of it intended to be detachable when drinking or for cleaning.

Drinking accessories

Any device fitted to a container which permits a child to obtain fluid from a container.

Drinking cups

Container other than a feeding bottle or feeding bag capable of holding a fluid intended for feeding a child.

Drinking equipment

Drinking equipment are articles, intended for children of 0 to 48 months of age, such as:

– Re-usable containers and reusable drinking accessories;

– Single-use containers and drinking accessories sold with these containers:

– Single-use feeding teats;

– Ready to use feeding teats.

Feeding bag

Bag capable of holding fluid and supported for use by a holder.

Feeding bag holder

Support for a feeding bag.

Feeding bottles

Container which is capable of holding a fluid and incorporates a graduated scale suitable for visual measurement and is intended for feeding a child through a feeding teat or drinking accessory.

Feeding teats

Elastic drinking accessory other than a straw.

Matched components

Components which are intended to be used together whilst feeding a child.

Protruding part

Drinking accessory when assembled for its intended use a container.

Protective cover

Component to cover a drinking accessory.

ANNEX IV. RESTRICTED SUBSTANCES

1. RESTRICTED SUBSTANCES

Restricted substance name	CAS No.
1,3-Butadiene	106-99-0
2-Mercaptoimidazoline	96-45-7
2-Methyl-1,3- butadiene (isoprene)	78-79-5
2,2'-Methylenebis(6-tert-butyl-4-methylphenol)	119-47-1
Acetaldehyde	75-07-0
Acetone	67-64-1
Acrylonitrile monomer	107-13-1
Aluminium (Al)	7429-90-5
Antimony (Sb)	7440-36-0
Arsenic (As)	7440-38-2
Barium (Ba)	7440-39-3
Benzaldehyde	98-86-2
Benzene	71-43-2
Beryllium (Be)	7440-41-7
BHT	128-37-0
Bicyclo (2,2,1) hept-2-ene	498-66-8
Biphenyl	92-52-4
Bismuth (Bi)	7440-69-9
Boron (B)	7440-42-8
Butyl alcohol	71-36-3
Cadmium (Cd)	7440-43-9
Caprolactam	105-60-2
Cerium (Ce)	7440-45-1
Chromium (Cr)	7440-47-3
Chromium III (Cr^{3+})	16065-83-1
Chromium VI (Cr^{6+})	18540-29-9
Cobalt (Co)	7440-48-4
Copper (Cu)	7440-50-8
Dimethyl terephthalate	120-61-6
Ethyl acetate	141-78-6
Ethylbenzene	100-41-4
Ethylene glycol	107-21-1
Ethylenediamine	107-15-3
Fluorine (F)	7782-41-4
Formaldehyde	50-00-0
Gallium (Ga)	7440-55-3
Germanium (Ge)	7440-56-4
Glyoxal	107-22-2

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Restricted substance name	CAS No.
Hafnium (Hf)	7440-58-6
Heptane	142-82-5
Hexafluoropropylene	116-15-4
Hexamethylendiamine	100-97-0
Hexane	110-54-3
Imazalil	35554-44-0
Iron (Fe)	7439-89-6
Isobutyl alcohol	78-83-1
Isophthalic acid	121-91-5
Isopropyl alcohol	67-63-0
Isopropylbenzene	98-82-8
Lactic acid	50-21-5
Laurolactam	947-04-6
Lead (Pb)	7439-92-1
Lithium (Li)	7439-93-2
Magnesium (Mg)	7439-95-4
Manganese (Mn)	7439-96-5
Melamine monomer	108-78-1
Mercury (Hg)	7439-97-6
Methyl alcohol	67-56-1
Alpha-Methylstyrene	98-83-9
Molybdenum (Mo)	7439-98-7
Nickel (Ni)	7440-02-0
Niobium (Nb)	7440-03-1
o-Phenylphenol	90-43-7
Pentachlorophenol (PCP)	87-86-5
Perfluorooctanesulfonic acid (PFOS)	1763-23-1
Perfluorooctanoic acid (PFOA)	335-67-1
Peroxide	8007-30-5 / 7722-84-1
Phenol	08-95-2
Phosphorous (P)	7723-14-0
Polychlorinated biphenyls (PCB)	1336-36-3
Potassium Permanganate	7722-64-7
Propyl alcohol	71-23-8
Propylbenzene	103-65-1
Rubidium (Rb)	7440-17-7
Selenium (Se)	7782-49-2
Silicium (Si)	7440-21-3
Silver (Ag)	7440-22-4

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Restricted substance name	CAS No.
Sodium-2-mercaptobenzothiazole	2492-26-4
Strontium (Sr)	7440-24-6
Styrene monomer	100-42-5
Sulphur dioxide	0007446-09-5
Tantalum (Ta)	7440-25-7
Terephthalic acid	100-21-0
Tetrafluoroethylene	116-14-3
Thallium (Tl)	7440-28-0
Thiabendazole	148-79-8
Tin (Sn)	7440-31-5
Titanium (Ti)	7440-32-6
Toluene	108-88-3
Trichlorophenol	25167-82-2
Triethanolamine	102-71-6
Tungsten (W)	7440-33-7
Vanadium (V)	7440-62-2
Xylols (isomer mixture)	1330-20-7
Zinc (Zn)	7440-66-6
Zirconium (Zr)	7440-67-7
Acrylates	
2-Hydroxyethyl acrylate	818-61-1
2-Propenoic acid	79-10-7
2-Propenoic acid-2-methylpropyl ester	106-63-8
2-Propenoic acid, 1,1-dimethylethyl ester	1663-39-4
2-Propenoic acid, octyl ester	2499-59-4
2-Propenoic acid, polymer with 2-ethylhexyl 2-propenoate	25134-51-4
Butyl acrylate	141-32-2
Ethyl acrylate	140-88-5
Iso-propyl acrylate	689-12-3
Methyl acrylate	96-33-3
Polyacrylate	–
Propenoic acid benzyl ester	2495-35-4
Propyl acrylate	925-60-0
Sec-butyl acrylate	2998-08-5
Methacrylates	
2-Hydroxyethyl-2-methyl-2-acrylate	868-77-9
2-Methyl-2-propenoicacianhydride	760-93-0
Methacrylic acid (2-methylpropenoic acid)	79-41-4
2-Propenoic acid, 2-methyl-, propyl ester	2210-28-8

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Restricted substance name	CAS No.
Benzyl methacrylate	2495-37-6
Butyl methacrylate	97-88-1
Ethyl methacrylate	97-63-2
Iso-propyl methacrylate	4655-34-9
Isobutyl methacrylate	97-86-9
Methyl methyacrylate	80-62-6
Phenol, polymer with (*R*)-1-methyl-4-(1-methylethenyl)cyclohexene	585-07-9
Phenyl methacrylate	2177-70-0
Sec-butyl methacrylate	2998-18-7
Isocyanates	
1,5-Naphthalene diisocyanate	3173-72-6
2,4-Toluene diisocyanate (2,4 TDI)	584-84-9
2,4-Toluene diisocyanate dimer	26747-90-0
2,6-Toluene diisocyanate (2,6 TDI)	91-08-7
3,3′-Dimethyl-4,4′-diisocyanatobiphenyl	91-97-4
Cyclohexyl isocyanate	3173-53-3
Dicyclohexylmethane-4,4′- diisocyanate	5124-30-1
Diphenylether-4,4′-diisocyanate	4128-73-8
Diphenylmethane-2,4′-diisocyanate	5873-54-1
Diphenylmethane-4,4′-diisocyanate (MDI)	101-68-8
Hexamethylene diisocyanate (HMDI)	822-06-0
Isophorone diisoyanate (IPDI)	4098-71-9
Octadecyl isocyanate	112-96-9
Tetramethylxylene diisocyanate (TMXDI)	2778-42-9
PAHs	
Anthracene	120-12-7
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Benzo(e)pyrene	192-97-2
Benzo(ghi)perylene	191-24-2
Benzo(j)fluoranthene	205-82-3
Benzo(k)fluoranthene	207-08-9
Chrysene	218-01-9
Dibenzo(a,h)anthracene	53-70-3
Fluoranthene	206-44-0
Indeno (1,2,3-cd)pyrene	193-39-5
Naphthalene	91-20-3
Phenanthrene	85-01-8

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Restricted substance name	CAS No.
Pyrene	129-00-0
Azo dyes	
2-Amino-4-nitrotoluene	99-55-8
2-Naphthylamine	91-59-8
2,4-Diaminoanisole	615-05-4
2,4-Toluenediamine	95-80-7
2,4-Xylidine	95-68-1
2,4,5-Trimethylaniline	137-71-7
2,6-Xylidine	87-62-7
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0
3,3'-Dimethylbenzidine (o-Tolidine)	119-93-7
4-aminodiphenyl	92-67-1
4-Chloro-o-toludine	95-69-2
4,4'-Diaminodiphenylmethane	101-77-9
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4
4,4'-Oxydianiline	101-80-4
4,4'-Thiodianiline	139-65-1
Benzidine	92-87-5
o-Aminoazotoluene	97-56-3
o-Anisidine	90-04-0
o-Toluidine	95-53-4
p-Aminoazobenzene	60-09-3
p-Chloroaniline	106-47-8
p-Cresidine	120-71-8
2-Amino-4-nitrotoluene	99-55-8
PAAs	
2-Methoxy-5-Methylaniline	120-71-8
2,4-Dimethylaniline	95-68-1
2,4-Toluenediamine	95-80-7
2,4,5-Trimethylaniline	137-17-7
2,6-Dimethylaniline	87-62-7
2,6-Toluenediamine	823-40-5
3,3-Dimethylbenzidine	119-93-7
4-Aminobiphenyl	92-67-1
4-Chloro-Aniline	106-47-8
4-Chloro-o-Toluidine	95-69-2
4-Methoxy-m-phenylenediamine	615-05-4

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Restricted substance name	CAS No.
4,4-Diaminodiphenylether	101-80-4
4,4-Methylenedi-o-toluidine	838-88-0
4,4'-Methylenedianiline	101-77-9
Aniline	62-53-3
Benzidine	92-87-5
m-Phenylenediamine	108-45-2
o-Anisidine	90-04-0
o-Toluidine	95-53-4
p-Phenylenediamine	106-50-3

ANNEX V. COMMITMENT TO COMPLY WITH INDITEX GROUP'S i+FCM STANDARD

COMMITMENT TO COMPLY WITH INDITEX GROUP'S i+FCM STANDARD

I hereby confirm that:

1. We have received the Inditex Precautions and Limits for Users Safety for Food Contact Materials (hereinafter, i+FCM), we have read it and thoroughly understand its implications.

2. We acknowledge that compliance with i+FCM is a contractual obligation and undertake, accordingly, to meet the i+FCM requirements in all orders involving production, marketing or distribution placed by any of the formats of the Inditex Group.

3. We undertake to disclose and formally demand i+FCM implications to the whole production line.

4. The Inditex Group:

    - Reserves the right to check: i) compliance with i+FCM regarding any goods supplied, by any method, at any time, and/or at any stage of the production, marketing or distribution processes, and ii) the appropriate disclosure of i+FCM.

    - Reserves the right to cancel any order for any goods where a non-compliance with i+FCM regarding any test and/or inspection has been established.

    - Reserves the right to return any orders already delivered where a non-compliance with i+FCM regarding any test and/or inspection has been established.

    - Reserves the right to cancel or destroy, or to order destruction of the goods subject to the cancelled order, subject to the fact that the cancellation of the relevant order shall entail the non-existence of the obligation to pay any sum whatsoever for the goods failing to comply with i+FCM.

    - Holds the Supplier as solely responsible for any and all damages caused by goods failing to comply with i+FCM;

and lastly,

5. We acknowledge that approval of a "sample" and any subsequent "repetition" of goods by the INDITEX Group do not release us from our liability, for the entire production, marketing and distribution processes.

THE SUPPLIER IS RESPONSIBLE FOR ALWAYS REFERRING TO THE LATEST UPDATED VERSION OF THIS DOCUMENT, AVAILABLE AT **www.inditex.com**

The information contained in this Standard is subject to changes.

The latest version of this Standard will always prevail.

Refer to: www.inditex.com or Inditex supplier Extranet

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