

i+Home Fragrances & Candles

Inditex Precautions and Limits for Users Safety
for Home Fragrances & Candles



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INDEX



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I. DEFINITION AND SCOPE



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DEFINITION OF INDITEX PRECAUTIONS AND LIMITS FOR USERS SAFETY FOR HOME FRAGRANCES & CANDLES

Inditex Precautions and Limits for Users Safety for Home Fragrances & Candles (hereinafter, **i+HF&CND**) 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 Denmark and Germany–; United States of America (USA); Canada; Australia; People’s Republic of China (China); Japan; the Republic of Korea (South Korea), Mexico and MERCOSUR.
- 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+HF&CND** is of general and mandatory application for all types of consumer products intended for masking odours, freshening, cleaning, scenting or deodorizing the air (e.g., reed diffusers, car fresheners, home sprays, incenses, scented candles, scented cards or scented bags) and for all type of candles and candle accessories.
- The Supplier is the only party responsible for the compliance of the products supplied to Inditex with the **i+HF&CND** Standard.

In this document, a detailed study and review of the most important regulations worldwide is gathered, to provide a general understanding about product health and safety compliance. If you, as an Inditex Supplier, are using products not mentioned in this Standard, please contact the Inditex Sustainability Department (i+hf&cnd@inditex.com) to get further information on how to achieve compliance of your products with the Inditex requirements for home fragrances and candles.

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 Standard, 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 the **i+HF&CND** Standard, 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’ and will audit the factories at any time in order to ensure the total compliance with this Standard.

DEFINITION OF HOME FRAGRANCE & CANDLE

Home fragrance

Home fragrance, or air freshener, means any consumer product designed for the purpose of masking odours, or freshening, cleaning, scenting or deodorizing the air and other products that are expressly represented for use as air fresheners. This definition does not include products that are used on the human body, products that function primarily as cleaning or disinfectant products claiming to deodorize by killing germs on surfaces.

Home fragrance can be classified into two groups:

- **Non–burnable home fragrances:** products containing a fragrance intended to be released into the air (e.g., home sprays, potpourri, reed diffusers, scented bags and cards, car fresheners, etc.).¹
- **Burnable home fragrances (or home fragrances by combustion):** products consisting of a combustible scented material which, by the action of combustion, releases into the air fragrant substances (e.g., scented candles, incenses, etc.).¹

¹ See definitions in Annex II.



Candle

A candle consists in one or more wicks supported by a solid, semi-solid or quasi-rigid combustible material at room temperature (20 to 27°C), whose combined function is to maintain a luminous flame.

Candles can be classified into two groups:

- **Scented candles:** Candle formed by a combustible material to which a fragrance has been added, intended to be released into the air, whose main purpose is to mask odours, refresh or perfume the air. Scented candles fall into the scope of “burnable home fragrances” (see definition above).
- **Unscented candles:** means any candle without aromatic additives, whose main purpose is to decor and/or for ambient lighting.

II. INDITEX OVERALL REQUIREMENTS



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INDITEX OVERALL REQUIREMENTS

All home fragrances and candles sold by Inditex worldwide must comply, among other regulations, with the General Product Safety Directive (GPSD) 2001/95/EC and its amendments.

The purpose of this regulation is to ensure that only safe products are made available on the market. The GPSD applies in the absence of other EU legislation, national standards, Commission recommendations or codes of practice relating to the product safety.

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

- **Quality assurance and quality control system:** All manufacturers shall establish and maintain an effective and properly documented quality control system.
- **Safety Data Sheets (SDS):** All Safety Data Sheets must be created according to the structure and contents requirements of Regulation (EC) Number 1907/2006 on the Registry, Evaluation, Authorization and Restriction of Chemicals (Article 31), and its amendments.
- **Classification and packaging:** All home fragrances and all type of candles, must be classified, labelled and packaged according to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures and its amendments.
- **Product shape:** Toy-shaped² or food-shaped³ home fragrances, candles and candles accessories are not permitted.
- **Restricted chemical composition:** Carcinogenic, mutagenic or reprotoxic substances (CMRs) classified as carcinogen category 1, 1A, 1B or 2; germ cell mutagen category 1, 1A, 1B or 2; or reproductive toxicant category 1, 1A, 1B or 2 according to Regulation (EC) No 1272/2008, shall not be used as a component of home fragrances or candles if the concentration of the substance in the product is equal to or greater than the specific or, in its absence, the generic concentration limit stipulated in Regulation (EC) No 1272/2008.
- **Parameters for raw materials and additives for candles:** All manufacturers are encouraged to select the raw materials and additives that follow the Inditex recommended parameters (see Annex III) in order to obtain high quality products.
- **Fragrances:** All home fragrances have to comply with the International Fragrance Association Standards (IFRA Standards),⁴ particularly with those regarding the purity requirements, prohibitions or restrictions of ingredients for their use in products belonging to IFRA QRA Categories 10A, 10B and 12.⁵
- **Candle wicks:** Metal-cored candle wicks shall not be used.
- **Packaging regulations:** Containers in contact with home fragrances and candles (i.e., primary packaging) shall not transfer any of the substances specified in this Standard to the product. Additionally, all primary packaging must comply with the applicable worldwide packaging regulations.

In addition, to ensure compliance with Inditex requirements, the Supplier should review Annex I of this Standard to check the applicable requirements for each type and part of the product. If the home fragrance or candle is different from those specified in Annex I, contact the Inditex Sustainability Department.

2 **Toy-shaped products:** a product designed or intended, whether or not exclusively, for use in play by children under 14 years of age. (Directive 2009/48/EC on the Safety of Toys and its amendments)

3 **Food-shaped products:** a product which possess a form, odour, colour, appearance, packaging, labelling, volume or size, such that it is likely that consumers, especially children, will confuse them with foodstuffs. (Directive 87/357/EEC and its amendments, concerning products which, appearing to be other than they are).

4 The IFRA Standards form the basis for the globally accepted and recognized risk management system for the safe use of fragrance ingredients and are part of the IFRA Code of Practice.

5 **Category 10A:** Fragranced oil for lamp ring, reed diffusers, potpourri and liquid refills for air fresheners (non-cartridges systems).

Category 10B: Air fresheners sprays, manual, including aerosol and pump such as home sprays and linen sprays.

Category 12: Products not intended for direct skin contact, minimal or insignificant transfer to skin such as scent candles, incense sticks, scented bags and cards, and liquid refills (cartridge).

III. GLOSSARY



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CLP	Classification, Labelling and Packaging
FAs	Fragrance Allergens
GC-MS	Gas Chromatography coupled to Mass Spectrometry
GC-MS/MS	Gas Chromatography coupled to Tandem Mass Spectrometry
GC-FID	Gas Chromatography coupled to Flame Ionization
GC-FID/ECD	Gas Chromatography coupled to Flame Ionization and Electron Capture Detectors
HPLC-DAD	High Performance Liquid Chromatography coupled to Diode-Array Detector
HPLC-UV	High Performance Liquid Chromatography coupled to Ultraviolet-Visible Spectroscopy
HS-GC-MS	Headspace Gas Chromatography coupled to Mass Spectrometry
HS-GC-FID/ECD	Headspace Gas Chromatography coupled to Flame Ionization and Electron Capture Detectors
LC-MS/MS	Liquid Chromatography coupled to Tandem Mass Spectrometry
MALDI-TOF- MS	Matrix-assisted Laser Desorption/ionization Time-Of-Flight Mass Spectrometry
nd	Not detected
PAHs	Polycyclic Aromatic Hydrocarbons
ppm	Parts per million, equivalent to mg/kg
REACH	Registry, Evaluation, Authorization and Restriction of Chemicals
SDS	Safety Data Sheet
SVHC	Substances of Very High Concern
TVOC	Total Volatile Organic Compounds
UV-Vis	Ultraviolet-Visible spectroscopy

IV. SUBSTANCES OF LEGALLY LIMITED USE



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IV. A. FRAGRANCE ALLERGENS

1. What are they?

Fragrance Allergens (FAs) are perfumed chemical substances that are present in fragrances and which are classified as potential causes of allergic reactions. There are 26 substances known as FAs, 24 of them are volatile compounds and the remaining 2 are natural extracts from lichens that are not consistent with any defined chemical substance, but whose main constituents are the allergic compounds chloroatranol (in Evernia prunastri, oak moss) and atranol (in Evernia furfuracea, tree moss).

2. Where can they be found?

FAs are perfumed substances, which are used to provide the consumer with a desired fresh smell or to mask unpleasant odours in perfumed consumer goods such as home sprays, scented candles, incenses, and other types of home fragrances. FAs can also appear as impurities of other synthetic ingredients.

3. How are they analyzed?

Potentially allergenic substances can be analyzed by GC-MS and GC-MS/MS.⁶ As an alternative, there are analytical methods for allergenic fragrances based on LC-MS/MS and HPLC-DAD. Chloroatranol and atranol, the main constituents of natural extracts from lichens, are analyzed by LC-MS/MS.⁶

4. Which are the acceptable limits?

To ensure compliance with Inditex requirements, the Supplier must comply with the following requirements:

⁶ The quantification limits for the selected method shall be lower than or equivalent to 0.0005 % (5 ppm) for all the FAs considered within this Standard.



IV. SUBSTANCES OF LEGALLY LIMITED USE

Type of product	Substance	CAS No	Maximum Allowed Concentration (%) ⁷		
			Cat. 10A	Cat. 10B	Cat. 12
All type of home fragrances (including scented candles)	Amyl cinnamal (or 2-Benzylideneheptanal)	122-40-7	1.5	3.5	Not restricted
	Amylcinnamyl alcohol (or 2-Pentyl-3-phenylprop-2-en-1-ol)	101-85-9	1.6	3.5	79
	Anisyl alcohol (or 4-Methoxybenzyl alcohol)	105-13-5	0.099	0.17	14
	Benzyl alcohol	100-51-6	2.2	8.5	Not restricted
	Benzyl benzoate (or Phenylmethyl benzoate)	120-51-4	1.9	12	Not restricted
	Benzyl cinnamate (or 3-Phenyl-2-propenoic acid phenylmethyl ester)	103-41-3	3.9	14	Not restricted
	Benzyl salicylate (or Benzyl-2-hydroxybenzoate)	118-58-1	51	51	Not restricted
	Cinnamyl alcohol (or 3-Phenyl-2-propen-1-ol)	104-54-1	0.76	2	51
	Cinnamal (or 3-Phenyl-2-propenal)	104-55-2	0.49	1.8	Not restricted
	Citral (or 3,7-Dimethyl-2,6-octadienal)	5392-40-5	1.2	4.2	Not restricted
	Citronellol (or (±)-3,7-Dimethyloct-6-en-1-ol)	106-22-9	87	87	Not restricted
	Coumarin (or 2H-1-Benzopyran-2-one)	91-64-5	0.52	1.6	33
	Eugenol (or 2-Methoxy-4-(2-propenyl)-phenol)	97-53-0	4.9	18	Not restricted
	Farnesol (or 3,7,11-Trimethyldodeca-2,6,10-trien-1-ol)	4602-84-0	8.1	8.1	Not restricted
	Geraniol (or (2E)-3,7-Dimethyl-2,6-octadien-1-ol)	106-24-1	33	33	Not restricted
	Hexyl Cinnamal (or 2-Benzylideneoctanal)	101-86-0	69	69	Not restricted
	Hydroxycitronellal (or 7-Hydroxy-3,7-dimethyloctanal)	107-75-5	15	15	Not restricted
	Hydroxymethylpentyl cyclohexenecarboxaldehyde (or 4-(4-Hydroxy-4-methylpentyl)-3-cyclohex-3-ene-1-carbaldehyde (HMPCC))	51414-25-6/ 31906-04-4	0.2	0.2	91
	Isoeugenol (or 2-Methoxy-4-(1-propenyl)phenol)	97-54-1/ 5932-68-3	0.21	0.75	Not restricted
	Butylphenyl methylpropional (or 2-(4-tert-Butylbenzyl)propionaldehyde)	80-54-6	0.1	0.63	16
Limonene (or (4R)-1-Methyl-4-(1-methylethenyl)cyclohexene)	5989-27-5	See note ⁸			
Linalool (or 3,7-Dimethyl-1,6-octadien-3-ol)	78-70-6	See note ⁸			
Methyl 2-octynoate	111-12-6	0.33	0.33	Not restricted	
alpha-Isomethyl ionone (or 3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one)	127-51-5	100	100	Not restricted	
Evernia Prunastri Extract (or oak moss extract)	90028-68-5/ 57074-21-2	0.1	0.1	Not restricted	
Evernia Furfuracea Extract (or tree moss extract)	90028-67-4/ 526-37-4	0.1	0.1	Not restricted	
Test method		GC-MS or GC-MS/MS			

⁷ Maximum concentration limits established according to the IFRA restrictions of ingredients for the use in products belonging to IFRA Categories 10A, 10B and 12:

Category 10A: Fragranced oil for lamp ring, reed diffusers, potpourri and liquid refills for air fresheners (non-cartridges systems).

Category 10B: Air fresheners sprays, manual, including aerosol and pump such as home sprays and linen sprays.

Category 12: Products not intended for direct skin contact, minimal or insignificant transfer to skin such as scent candles, incense sticks, scented bags and cards, and liquid refills (cartridge).

⁸ – Peroxide level lower than 20 mmol/L; this limit is applied to the substance and not to the finished product.

Peroxides test method: The peroxides value must be determined according to the Fragrance materials association (FMA) method. In this method the sample is treated in solution with a mixture of acetic acid and a suitable organic solvent and then with a solution of potassium iodide. The liberated iodine is titrated with a standard solution of sodium thiosulfate.



5. How can they be avoided?

Manufacturers need to pay attention to assure that the raw materials used in the “aroma” or “fragrance” do not contain fragrant allergens. The Supplier should undertake and guarantee that the presence of FAs has been assessed and, if the concentrations exceed the limits established, their presence will be suitably stated on the end-product label.



IV. B. PHTHALATES

1. What are they?

Phthalates, or phthalate esters, are a group of chemical substances that have multiple uses in industry. Phthalates are mainly used as plasticizers –which allow plastic products to become softer and more flexible–, as solvents, preservatives, alcohol denaturants (for ethanol) and to make fragrances linger longer in cosmetics and home fragrances.

2. Where can they be found?

Phthalates can be found in home fragrances as solvents and fixatives for fragrances or as solvents in lacquers and in pigments and dyes formulations used in candles manufacturing. In addition, containers and lids made of plastic materials or the machinery used during the manufacturing process may contain phthalates which can migrate into the home fragrances.

3. How are they analyzed?

Phthalates can be analyzed by GC-MS or GC-MS/MS. As an alternative, they can be analyzed by HPLC-UV or GC-FID.

4. Which are the acceptable limits?

Type of product	Substance	CAS No.	Restriction / Maximum Limit	Test method
All type of home fragrances and candles	Diethylhexyl phthalate (DEHP)	117-81-7	0.1% of any	GC-MS ⁹
	Dibutyl phthalate (DBP)	84-74-2		
	Diisobutylphthalate (DIBP)	84-69-5		
	Bis-(2-methoxyethyl phthalate) (DMEP)	117-82-8		
	n-Pentyl-isopentylphthalate (PIPP)	776297-69-9		
	di-n-Pentyl phthalate (DPP)	131-18-0		
	Diisopentylphthalate (DIPP)	605-50-5		
	Benzyl butyl phthalate (BBP)	85-68-7		
	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0		
	Di-n-octyl phthalate (DNOP)	117-84-0		
	Di-isononyl phthalate (DINP)	28553-12-0 / 68515-48-0		
Di-isodecyl phthalate (DIDP)	26761-40-0 / 68515-49-1			

5. How can they be avoided?

There are alternatives for this type of compounds that perform the same functions, so the trend should be towards the complete elimination of these substances in new products that are launched on the market.

Avoiding using them as additives in home fragrances and candles.

Selecting the containers in such a way that none of their components are manufactured with plastics that may contain them as plasticisers.

⁹ The test method for solid home fragrances (such as candle wax) must be EN ISO 14389.



IV. C. SPECIFIC EMISSIONS

1. What are they?

They are specific substances emitted from combustible home fragrances into indoor air during and after combustion, such as benzene, formaldehyde or naphthalene.

2. Where they can be found?

Burnable home fragrances may emit during the combustion compounds such as benzene, formaldehyde, toluene, etc., in case the raw materials selection is not properly performed or if the manufacturing process is not appropriate.

3. How are they analyzed?

The emission of specific substances from burnable home fragrances is performed under controlled conditions in an emission test chamber according to EN 16738. The test chamber is at a constant temperature, relative humidity and specific airflow per area. Sampling is carried out at the exit of the test chamber, where the specific substances are collected in appropriate adsorption tubes or solutions.

4. Which are the acceptable limits?

Type of product	Substance	Concentration limits ($\mu\text{g}/\text{m}^3$)	Method
		TWA ¹⁰	
All types of burnable home fragrances (including scented candles and incenses)	Benzene	5 ¹¹	EN 16738; EN 16739
	Toluene	200	
	Styrene	260	
	Xylenes (o-, m-, p-)	200	
	Formaldehyde	30	
	Naphthalene	10 ¹²	
	Benzo[a]pyrene	nd ¹³	
	Acrolein	50	
TVOC	600		

5. How can they be avoided?

To meet the specific emissions requirement, manufacturers need to thoroughly monitor the quality of the raw materials and the manufacturing process.

10 Time weighted average concentration (exposure model defined in EN 16739:2015): average concentration expected from having one piece of the specimen in the European reference room (volume of 30 m³; air change rate of 0.5 h⁻¹). It is calculated on the basis of the worst case exposure time (4 hours per 24 hours) and the frequency of use (4 times per 7 days).

11 Directive 2008/50/EC on ambient air quality and clear air for Europe.

12 Annual average concentration.

13 LOD: 1 $\mu\text{g}/\text{m}^3$.



IV. D. AROMATIC SOLVENT RESIDUES

1. What are they?

Aromatic solvent remainders are substances such as benzene, toluene, ethylbenzene or xylenes that can be present in candles as residues coming from the manufacturing process of the raw materials.

2. Where can they be found?

They are mainly found in coloured or lacquered candles and candles made of paraffin wax.

3. How are they analyzed?

Weighed quantities of the test substance (2 g) are filled into headspace vials and are hermetically sealed. Then, the sample is equilibrated in a static headspace sampler at elevated temperature and transferred into a gas chromatographic column which separates the solvents by increasing boiling point. The eluted components are detected by a flame ionisation detector.

4. Which are the acceptable limits?

To comply with Inditex' requirements candles must comply with the following requirements:

Type of product	Parameter	Limit / Requirement	Test method
Scented and unscented candles	Benzene	0.5 ppm	EWF 002/03 (HS-GC-FID)
	Toluene	5 ppm	
	Ethylbenzene	20 ppm ¹⁴	
	Total xylenes	20 ppm ¹⁴	

5. How can they be avoided?

Suppliers need to pay attention to the raw materials and the manufacturing process in order to ensure that no contamination of organic solvents occurs during production. The use of colours and lacquers or paraffin wax may result in higher risk of exceeding the mentioned limits of aromatic solvent residues.

¹⁴ 50 ppm for screen printing lacquers.



IV. E. AZO DYES

1. What are they?

Azo dyes are substances containing azo groups (-N=N-) in their molecular structure where the azo group is associated with one or more aromatic rings to form a conjugated system. Azo dyes are widely used in colorant and pigment formulations but most of them are safe. Nevertheless, a small percentage of azo dyes can decompose by reductive cleavage of one or more azo groups, releasing one or more of the aromatic amines listed in Appendix 8 of Regulation (EC) No. 1907/2006 (REACH Regulation).

2. Where can they be found?

They can be found in coloured and lacquered candles.

3. How are they analyzed?

Detection of banned azo dyes in candles is performed by extracting the dyes using an organic solvent, and then transferring them to a reduction media. Then, quantification of amines –where present– is performed using HPLC/DAD or GC-MS (with internal standard).

4. Which are the acceptable limits?

To comply with Inditex' requirements all coloured or lacquered candles must comply with the following requirement:

Type of product	Parameter	Limit / Requirement	Test method
Scented and unscented candles	Azo dyes	30 ppm ¹⁵	§64 LFGB B 82.02-2

5. How can they be avoided?

Suppliers need to pay attention to the manufacturing process in order to ensure candle colours and lacquers containing azo dyes that may result in the release of one or more of the aromatic amines listed in Appendix 8 of Regulation (EC) No. 1907/2006 are not used. Red shades and/or colours, as well as bright scarlet and intense blacks may present a higher risk of containing the aforementioned azo dyes.

¹⁵ Limit referred to the concentration of the regulated aromatic amines (Appendix 8 of Regulation (EC) No. 1907/2006).



IV. F. METALS

1. What are they?

Metals are elements that can be present in candles and incenses, both in their elemental form or as part of chemical compounds, as impurities or as part of colourants and pigments. Metals contained in the base materials can result in undesirable changes because of their catalytic activity.

2. Where can they be found?

Metals ions are mainly found in coloured or lacquered candles and coloured incenses or as impurities in the raw materials.

3. How are they analyzed?

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

4. Which are the acceptable limits?

Type of product	Parameter	Content limit	Test method
Scented and unscented candles	Antimony (Sb)	10 ppm	Acid digestion - ICP-MS
	Arsenic (As)	10 ppm	
	Barium (Ba)	10 ppm	
	Cadmium (Cd)	1 ppm	
	Chromium (Cr)	40 ppm	
	Lead (Pb)	5 ppm	
	Mercury (Hg)	1 ppm	
Candle wicks	Lead (Pb)	5 ppm	Acid digestion - ICP-MS
	Ni (Ni)	5 ppm	
Incenses	Lead (Pb)	90 ppm	GB/T 26393
	Cadmium (Cd)	75 ppm	
	Mercury (Hg)	60 ppm	
	Chromium (Cr)	60 ppm	
	Arsenic (As)	25 ppm	

5. How can they be avoided?

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



IV. G. POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

1. What are they?

PAHs are a group of hydrocarbons composed of multiple aromatic rings. PAHs are typically formed during the incomplete combustion of organic matter and enter the air in soot or attached to dust particles.

2. Where can they be found?

PAHs could be present in candles as residues coming from the raw materials used in the manufacturing process or emitted during candle or incense burning due to incomplete combustion of organic matter.

3. How are they analyzed?

The PAHs are determined by extraction of the sample with an appropriate solvent. GC-MS is used to determine the levels of PAHs present in the extract.

4. Which are the acceptable limits?

Type of product	Parameter	CAS No.	Limit	Method
Scented and unscented candles	Benzo[a]pyrene (BaP)	50-32-8	< 1 ppm of any	AfPS GS 2019:01 PAK
	Benzo[e]pyrene (BeP)	192-97-2		
	Benzo[a]anthracene (BaA)	56-55-3		
	Chrysene (CHR)	218-01-9		
	Benzo[b]fluoranthene (BbFA)	205-99-2		
	Benzo[j]fluoranthene (BjFA)	205-82-3		
	Benzo[k]fluoranthene (BkFA)	207-08-9		
	Dibenzo[a,h]anthracene (DBahA)	53-70-3		
	Benzo[g,h,i]perylene	191-24-2		
	Indeno[1,2,3-cd]pyrene	193-39-5		
	Phenanthrene	120-12-7	< 50 ppm sum of 4 PAHs	
	Pyrene	129-00-0		
	Anthracene	120-12-7		
	Fluoranthene	206-44-0		
	Naphthalene	91-20-3	< 10 ppm	
Sum of 15 PAHs	–	< 50 ppm		

5. How can it be avoided?

Manufacturers need to pay attention to the process control to ensure that no contamination of PAHs occurs during production.



IV. H. SOOT INDEX

1. What is it?

The soot is a solid mixture of carbon enriched particles, which come into existence when the candle burning material in the flame is incompletely burned and released into the atmosphere. The soot index is the number for the evaluation of the sooting behaviour of candles.

Emissions of significant amounts of soot indicate that the candle might emit higher levels of other hazardous substances.

2. How is it analyzed?

The sooting behaviour of a candle is mainly influenced by the fuel flow, which is determined by the wick features (e.g., size, shape, etc.). All wicks consist of a bundle of fibers that are twisted, braided or knitted together. These fibers absorb the liquefied wax and carry it to the flame by capillary action. Therefore, different wick sizes allow for different amount of fuel to be drawn into the flame. If the amount of fuel (wax) to be burned is too high, the candle will soot.

3. Which are the acceptable limits?

Type of product	Parameter	Limit	Method
Scented and unscented candles	Soot index	$\leq 1 / \text{hour}^{16}$	EN 15426:2018

4. How can it be avoided?

The Supplier shall take great care in selecting a wick of the proper size, shape and material to meet the burn requirements of a particular candle.

¹⁶ 3 test sample average.



IV. I. OTHER RESTRICTED SUBSTANCES

1. What are they?

- **Boric acid tetrasodium salt:** Sodium borate is a white, powdery mineral used as a buffering pH adjuster in numerous products types, such as home fragrances, cleaning, laundry or personal care products.
- **Chloroethene (or vinylchloride):** Vinylchloride was commonly used as a propellant in aerosol home fragrances.
- **5-Chloro-2-methyl-4- isothiazolin-3-one (CMIT) and 2-Methyl-4-isothiazolin-3-one (MIT):** These substances are thiazole, heterocyclic aromatic compounds that have biocide and preservative functions and which are used in a wide range of industrial applications and products, such as home fragrances, cleaning fluids, detergents, waxes, etc.
- **1,4 – Dichlorobenzene (p-DCB):** p-DCB acts as disinfectant or pesticide, controlling the growth of moths, molds and mildew. In addition, p-DCB can be used as deodorant in home fragrances.
- **Ethoxyethyl guanidine chloride (PGH), polyhexamethylene guanidine (PHMG) and poly(hexamethylene biguanide) hydrochloride (PHMB):** These substances are guanidine derivatives that are used as disinfectants.
- **Benzene:** A substance that can be present in home fragrances as an impurity coming from the fragrance extraction step with benzene or other organic solvent contaminated with this solvent.
- **Formaldehyde:** A colourless, flammable gas at room temperature that has a pungent, distinct odour. Formaldehyde and formaldehyde-releasing preservatives are used in home fragrances and personal care products to prevent microbes from growing in water-based products.
- **Glyoxal:** Glyoxal has a nature such that it chemically reacts with active nitrogen and active sulphur compounds and various other kinds of materials having an offensive odour, and changes them to odourless compounds. Due to their nature, glyoxal based deodorizing compositions are widely used as deodorizing agents in the industrial field and in home use.
- **Methanol:** Methyl alcohol or methanol is an aliphatic alcohol that can be used in home fragrances as solvent or to denature ethyl alcohol.
- **Trichloroethylene (TCE):** TCE is an effective solvent for a variety of organic materials. Trichloroethylene can be used as an extraction solvent for greases, oils, fats or waxes.
- **Propylene glycol (or 1,2-propanediol); isopropyl alcohol (or propan-2-ol); ethylene glycol; dipropylene glycol monomethyl ether (DPGME); benzoic acid; salicylic acid; benzyl alcohol; methyl salicylate; 1,2-benzisothiazol-3(2H)-one (BIT); triclosan; 2-octyl-2H-isothiazol-3-one (OIT); didecylidmonium chloride (DDAC); benzalkonium chloride (BKC); pyrethrins; alkyl(c=12-18)benzylidimethylammonium chloride; benzyl(C=12-16) alkyldimethyl chlorides; silver; alpha-pinene; vinyl acetate; triclycodecenyl acetate; and triethanolamine:** All these substances can be used as preservatives in home fragrances to prevent the growth of undesirable microorganisms.

2. Where can they be found?

These substances can be present in home fragrances as preservatives as solvents or as impurities.

3. How are they analyzed?

- **Boric acid tetrasodium salt:** The presence of disodium tetraborate in home fragrances can be determined by testing total boron and sodium by elemental screening (acid digestion followed by ICP). Additional confirmation can be obtained by an extractive approach and calculating the disodium tetraborate amount.



IV. SUBSTANCES OF LEGALLY LIMITED USE

- **Chloroethene (or vinylchloride):** This substance can be analyzed by GC-FID or GC-MS.
- **5-Chloro-2-methyl-4- isothiazolin-3-one (CMIT) and 2-methyl-4-isothiazolin-3-one (MIT):** Detection of CMIT and MIT can be performed by ultrasonic extraction of the isothiazolinones with methanol and HPLC–UV analysis of the extract. Nevertheless, for gels (including liquids that do not dissolve in methanol) and solid samples, detection of CMIT and MIT can be achieved by ultrasonic extraction with an acetone / hexane mixture 1:1. Then, after filtrating and concentrating the extraction solutions, the samples are dissolved in methanol and analyzed using an HPLC–UV.

As alternative, there are analytical methods for the analysis of CMIT and MIT based LC-MS and GC-MS.¹⁷

- **1,4-Dichlorobenzene (p-DCB); benzene and trichloroethylene (TCE):** These substances are volatile organic compounds that can be determined using GC-MS. There are various techniques by which these compounds may be introduced into the GC/MS system. Purge–and–trap by EPA methods 5030 and 5035, is the most commonly used technique. Additionally, automated static headspace by method 5021 can be used for solid samples.
- **Ethoxyethyl guanidine chloride (PGH); polyhexamethylene guanidine (PHMG); and poly(hexamethylene biguanide) hydrochloride (PHMB):** Qualitative method: Detection of PGH, PHMG and PHMB can be performed by UV-VIS spectrophotometer using Eosin Y as indicator. The absorbance of the ionic derivative formed in the acidic medium is determined by scanning the region from 450 to 650 nm. Quantitative method: Test samples are diluted with methanol in acidic conditions, then, the solid phase is extracted and measured with a MALDI-TOF-MS.
- **Formaldehyde and glyoxal:** Test samples are diluted with distilled water, derivatized with 2,4-dinitrophenylhydrazine and extracted with acetonitrile. Finally, the aldehyde extract is analyzed using an HPLC–UV.
- **Methanol:** The methanol content in an air freshener can be determined by ultrasonic extraction in ethanol (or isopropyl alcohol) followed by GC-FID analysis. If it is not possible to extract the sample using ethanol or isopropyl alcohol, other organic solvents can be used.
- **3-Iodine-2-propynyl butyl carbamic acid:** LC-MS or GC-MS can be used to determine the levels of 3-iodine-2propenyl butyl carbamic acid.
- **Propylene glycol (or 1,2-propanediol); isopropyl alcohol (or propan-2-ol); ethylene glycol; and dipropylene glycol monomethyl ether (DPGME):** GC-MS can be used to determine the levels of these substances.
- **Benzoic acid; salicylic acid; benzyl alcohol; methyl salicylate; 1,2-benzisothiazol-3(2H)-one (BIT); triclosan; and 2-octyl-2H-isothiazol-3-one (OIT):** The presence of these substances can be determined by HPLC-UV.
- **Didecyldimonium chloride (DDAC); benzalkonium chloride (BKC); pyrethrins; alkyl(c=12-18)benzyltrimethylammonium chloride; and benzyl(C=12-16) alkyldimethyl chlorides:** The presence of these substances can be determined by LC-MS.
- **Silver:** ICP-MS can be used to determine the amount of silver in the final product.

¹⁷ Use the appropriate Korean method “Public Notice on Safety and Labelling Standards for Products of Risk Concerns (MOE Public Notice No. 2016-656 and its amendments); Annex 3 – Part 9”.



4. Which are the acceptable limits?

Type of product	Substance	CAS No.	Restriction / Maximum Limit ¹⁸	Test Method
All types of home fragrances (including home sprays, candles and incenses)	Ethoxyethyl guanidine chloride (PHG)	–	Prohibited	UV-Vis spectrophotometer (qualitative analysis) or MALDI-TOF-MS (quantitative analysis)
	Polyhexamethylene guanidine (PHMG)	31961-54-3		
	Poly (hexamethylene biguanide) hydrochloride (PHMB)	32289-58-0		
	5-Chloro-2-methyl-4-isothiazolin-3-one (CMIT)	26172-55-4		LC-MS or GC-MS
	2-Methyl-4-isothiazolin-3-one (MIT)	2682-20-4		
All types of home fragrances (except candles)	Boric acid tetrasodium salt	1330-43-4	Prohibited	Acid digestion followed by ICP
	1,4-Dichlorobenzene	106-46-7		GC-MS
	Benzene	71-43-2	Prohibited (LOD 5 mg/kg)	GC-MS
	Chloroethene (or vinylchloride)	75-01-4		HS-GC-MS
	Trichloroethylene (TCE)	79-01-6	2000 mg/kg	GC-MS
	Methanol	67-56-1		GC-FID
	3-Iodine-2-propynyl butylcarbamic acid (IPBC)	55406-53-6	8 mg/kg	LC-MS
All types of home fragrances (except home sprays, candles and incenses)	Formaldehyde	50-00-0	25 mg/kg	HPLC-UV
	Glyoxal	107-22-2	70 mg/kg	
	Acetaldehyde	75-07-0	300 mg/kg	
Home sprays and incenses	Formaldehyde	50-00-0	12 mg/kg	
	Glyoxal	107-22-2	30 mg/kg	
	Acetaldehyde	75-07-0	60 mg/kg	

18 According Korean regulation.



IV. SUBSTANCES OF LEGALLY LIMITED USE

In addition to above requirements, air fresheners (except candles) shall comply with the following restrictions:

Substance	CAS No.	Maximum Limit (%) ¹⁸				Test Method
		Home fragrances ¹⁹		Car air freshener		
		In spray	Others than sprays	In spray	Others than sprays	
Propylene glycol	57-55-6	-	-	47	-	GC-MS
Isopropyl alcohol	67-63-0	25	-	12	-	
Ethylene glycol	107-21-1	0.2	-	0.2	-	
Dipropylene glycol methyl ether	34590-94-8	-	-	57	-	
Benzoic acid	65-85-0	3	-	1	-	HPLC-UV
Salicylic acid	69-72-7	88	-	37	-	
Benzyl alcohol	100-51-6	36	-	17	-	
Methyl salicylate	119-36-8	27	-	13	-	
1,2-Benzisothiazole-3(2H)-one	2634-33-5	1.5	-	0.7	-	
Triclosan	3380-34-5	26	-	16	-	
2-Octyl-3(2H)-isothiazol-3-one	26530-20-1	0.4	-	0.12	-	LC-MS
Didecyldimethylammonium chloride	7173-51-5	0.01	-	0.005	-	
Benzalkonium chloride ²⁰	8001-54-5	1	-	0.5	-	
Pyrethrins	8003-34-7	1	-	0.7	-	
Triethanolamine	102-71-6	2	-	1	-	
Diphenyl ether	101-84-8	1	7	0.6	6	ICP-MS
Silver	7440-22-4	0.04	-	0.02	-	
Alpha-pinene	80-56-8	7	39	3	30	GC-MS
Vinyl acetate	108-05-4	5	26	2	20	
Tricyclo decenyl acetate	5413-60-5	6	35	3	27	

5. How can they be avoided?

By obtaining from the Suppliers the undertaking and the guarantee that the presence of the aforementioned substances has been assessed and that final products supplied do not contain any of the restricted substances in higher amounts than the established limits.

¹⁹ Except those intended to be used as car air fresheners.

²⁰ This restriction also applies to following substances: Alkyl (c=12-18) benzyldimethylammonium chloride (CAS 68391-01-5) and Benzyl (C=12-16) alkyldimethyl, chlorides (CAS 68424-85-1).

V. SAFETY REQUIREMENTS



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Inditex Precautions and Limits for Users Safety
for Home Fragrances & Candles



V. A. SAFETY REQUIREMENTS FOR CANDLES

V. A. 1. SPECIFICATIONS FOR FIRE SAFETY

1. What are they?

The specifications²¹ enclosed herein are intended to define the minimum requirements for candles to provide a reasonable degree of safety during their normal use, thereby improving personal safety and reducing fires, deaths and injuries.

2. How are they analyzed?

Candle burning performance: the sample candles are lit and allowed to be burned according to the internal method **ITX-candles**²², which is based on the instructions described in the QB/T 4359, QB/T 2119, GB/T 22256, QB/T 2903, EN 15493-2019, and ASTM F2417-17 standards and is implemented as described below.

Determination of the burning behaviour, candle stability while burning, container integrity, wick posture, flame height, secondary ignition, end of useful life, reignition after extinguishing, aftersmoking and flame impingement: The sample candles are lit and allowed to be burned according to the ITX-candles protocol²² with periodic observation. Flame heights are measured at specific intervals and recorded before extinguishing in each burning cycle.

Stability: The unlit sample candles are placed on an inclined plane in the orientation most likely to cause tipping ($10^\circ \pm 0.2$). Rotation around the candle's vertical axis may be necessary to determine the stability of an asymmetrical candle. To evaluate all these parameters a minimum of 4 identical candles must be evaluated.

Melting point is determined by using the cooling curve method. A sample of molten wax in a test tube fitted with a thermometer is placed in an air bath which, in turn, is surrounded by a water bath maintained between 16 and 28°C.

As the molten wax cools, periodic readings of its temperature are taken. When solidification of the wax occurs, the rate of temperature change decreases, yielding a plateau in the cooling curve.

Wick eccentricity is measured in 4 candles with a vernier caliper. The maximum value among test results of the 4 samples is taken as the final test result.

3. Which are the acceptable limits?

To comply with Inditex' requirements the Supplier must ensure that the candles comply with the following specifications:

²¹ See definitions in Annex II.

²² See Annex V.



V. SAFETY REQUIREMENTS

Parameter ²⁸	Type of product	Requirement	Method
Burning behaviour	All types of candles	After being lit, the candle has to show a bright, calm flame, without noise ²³ and gradually form a cup rim surrounding the so-called burning bowl. The candle must burn evenly. The flame burns without visible release of soot and self-extinguishing	ITX-Candles ²⁴
Stability while burning	Freestanding, filled and tea light candles	The candle must not tip over	
Flame Height	Art candles	≥ 6 mm and ≤ 50 mm	
	Basic candles	≤ 50 mm	
	Filled candles	≥ 15 mm and ≤ 50 mm	
	Jelly candles	≤ 50 mm	
	Tea lights	≥ 14 mm and ≤ 25 mm	
Wick posture (while burning)	All types of candles	Medium curvature ²⁵	
Secondary ignition	All types of candles	No secondary ignition shall occur	
End of useful life	Filled candles, tea lights and freestanding candles marketed as self-extinguishing	Filled candles and candles marketed as self-extinguishing shall self-extinguish at the end of the burning time	
	Non-freestanding candles marketed as self-extinguishing	Non-freestanding candles marketed as self-extinguishing shall self-extinguish at a residual height of: ≥ 12 mm (for candles with a diameter of ≤ 14 mm) ≥ 18 mm (for other candles)	
	Tea light	If the burning time is longer than marked on the product, the temperature of the molten bath shall be lower than 100°C	
Reignition after extinguishing	All types of candles	No spontaneous reignition shall occur	
Aftersmoking after extinguishing	All types of candles (except tea lights)	15 or 20 s ²⁶	
	Tea lights	10 s	
Flame impingement	Freestanding candles	Candle flames shall not impinge on the supporting surface	
Stability (on incline plane of 10°)	Freestanding, filled and tea light candles	No tip over shall occur	See note ²⁷
Melting point	Basic candles	≥ 54°C	QB/T 2119
Wick eccentricity ²⁸	All types of candles (except art candles and tea lights)	≤ 1/6 of the candle radius (≤ 3 mm)	See note ²⁹
	Tea lights	≤ 1 mm	QB/T 4359

23 Only for basic candles.

24 See the ITX-Candles protocol in the Annex V.

25 See Annex II for “wick medium curvature” definition.

26 15 s for jelly candles; 20 s for basic, jar and art candles.

27 Use the appropriate method according to the candle type: QB/T 2902 for art candles, QB/T 2119 for basic candles, GB/T 22256 for jelly candles, QB/T 2903 for jar candles and QB/Y 4359 for tea lights.

28 Wicks must be positioned in the candle center, except for candles with more than one wick.

29 Use the appropriate method according to the candle type: QB/T 2119 for basic candles, GB/T 22256 for jelly candles and QB/T 2903 for jar candles.



V. B. SAFETY REQUIREMENTS FOR CANDLE CONTAINERS AND ACCESSORIES

V. B. 1. SAFETY REQUIREMENTS FOR CANDLE CONTAINERS

1. What are they?

The specifications³⁰ enclosed herein are intended to define the minimum requirements for candle containers to provide a reasonable degree of safety during their normal use, thereby improving personal safety and reducing fires, deaths and injuries.

2. How are they analyzed?

Container integrity and secondary ignition: Perform visual inspection of candle containers with the intended candle(s) installed during the candle burning process, performed according to the ITX-candles protocol.³¹

Flammability: the sustained flaming combustion of the plastic container with the intended candle(s) installed is monitored during the candle burning process according to the ITX-candles protocol.³¹

Surface temperature: the surface temperature of containers with the intended candle(s) installed is determined by measuring the temperature with an infrared thermometer during the candle burning process, performed according to the ITX-candles protocol.³¹

Thermal shock resistance of containers made of glass is determined by visual check of the container integrity after their exposure to alternating low and high temperatures to accelerate failures caused by temperature cycles or thermal shocks during normal use.

Annealing:

- Containers made of transparent glass: Containers are examined under polarized light using a polariscope.
- Containers made of coloured glass: If glass condition (colour, decoration, etc.) prohibits sufficient light transmission for use of a polariscope, annealing shall be qualified through the use of the Scratch Test according to ASTM F2179.

Calibre of tea light cups is determined by measuring the maximum outside diameter of the container with a vernier caliper.

30 See definitions in Annex II.

31 See protocol in Annex V.



V. SAFETY REQUIREMENTS

3. Which are the acceptable limits?

To comply with Inditex' requirements the Supplier must review the following parameters:

Type of product	Parameter	Limit / Requirement		Test method
All types of containers	Container integrity	The container shall not crack, break or suffer other deformations during the burning test or after self-extinguished		ASTM F2601 (with reference to ITX-candles ³² for burning test)
	Secondary ignition	Secondary ignition shall not occur		
Containers made of Plastic (or other materials different of metal, ceramic and glass)	Flammability	Total burn time	< 300 s	ASTM F2417
		Single burn time	< 30 s	
		No single plastic container shall be completely consumed during testing		
	Surface temperature ³³	Parts intended to be hold or touched	≤ 75°C	GB/T 22256 or QB/T 2903 ³⁴
Accessible parts		≤ 125°C		
Container base		≤ 135°C		
Metallic container	Surface temperature	Parts intended to be hold or touched	≤ 55°C	GB/T 22256 or QB/T 2903 ³⁹
		Accessible parts	≤ 105°C	
		Container base	≤ 110°C	
Containers made of ceramic	Surface temperature	Parts intended to be hold or touched	≤ 65°C	GB/T 22256 or QB/T 2903 ³⁹
		Accessible parts	≤ 120°C	
		Container base	≤ 125°C	
Containers made of glass	Surface temperature	Parts intended to be hold or touched	≤ 65°C	GB/T 22256 or QB/T 2903 ³⁹
		Accessible parts	≤ 120°C	
		Container base	≤ 125°C	
Containers made of glass	Thermal shock resistance ($\Delta T = 50^\circ\text{C}$)	Containers shall not crack or break		ASTM C149
	Annealing	Transparent glass	Real temper number ≤ 4	ASTM C148 (Polariscope method)
		Non-Transparent glass	No fractures	
Tea light cups	Calibre ³⁵	3.8 – 5.8 cm		QB/T 4359

V. B. 2. SAFETY REQUIREMENTS FOR CANDLE ACCESSORIES

1. What are they?

The specifications³⁶ enclosed herein are intended to define the minimum requirements for candle accessories to provide a reasonable degree of safety during their normal use, thereby improving personal safety and reducing fires, deaths and injuries.

32 See protocol in Annex V

33 Only for plastic containers. Not applicable to tea light cups.

34 Use the appropriate method according to the type of candle: GB/T 22256 for jelly candles or QB/T 2903 for jar candles.

35 The maximum outside diameter measure of the container.

36 See the specifications definitions in Annex II.



2. How are they analyzed?

Stability: Place candle accessories with the intended candle(s) installed on a 10.0° incline to determine if they remain in a stable, upright position without tipping over.

Flammability: Components of candle accessories are tested on a flat, non-combustible surface through contact with the flame source for up to 60 s. Each test is monitored for sustained flaming combustion of the component. Three separate tests are performed on each type of component of the accessory. The burning time of each test is measured and recorded.

Breaks, cracks and other deformations, secondary ignition, excessive flame height and problems at the end of useful life: Perform visual inspection of candle or potpourri burners with the intended candle(s) installed during the candle burning process, performed according to the ITX-candles protocol.³⁷

3. Which are the acceptable limits?

To comply with Inditex' safety requirements for candle accessories, the Supplier must review the following parameters:

Type of product ³⁸	Parameter	Limit / Requirement		Test method
All candle accessories ³⁹	Stability (on incline plane of 10°)	No tip over shall occur ⁴⁰		ASTM F2601
Candle holders and rings	Flammability ⁴¹	Total burn time	≤ 30 s / component	ASTM F2601
		Single burn time	≤ 60 s / component	
Candle and potpourri burners ⁴²	Breaks, cracks and other deformations	nd ⁴³		ASTM F2601 (with reference to ASTM F2417)
	Secondary ignition	nd ⁴³		
	Excessive flame height	nd ⁴³		
	Problems at the end of useful life	nd ⁴³		

37 See protocol in Annex V.

38 See definitions in Annex II.

39 Safety requirement applicable to all accessories intended to be used in direct contact with burning candles.

40 The label of all candle accessories intended to be used with a maximum candle size must include the following warning: "⚠ WARNING: Do not use a candle greater than X inches tall" (where X is the maximum allowable height of the candle). The label of all candle holders which have the capability of accepting multiple types or multiple quantities of candles, or both, must include the following warning: "⚠WARNING: For use with quantity of candles, maximum candle size, number of wicks, type of candle(s)".

41 The test shall be conducted on all applicable components of the candle accessory. During the test, flaming shall not spread over the entire candle accessory. The accessory shall pass the flammability requirements if it does not ignite or if it complies with the total and the single burning times.

42 Candle burners shall be tested with a tea light or other specified or supplied candle. Potpourri burners shall be burned with the specified material or scented wax if no materials are specified.

43 Use a minimum of 3 identical samples to check this parameter and examine at least eight burn cycles each sample.



V. C. SAFETY AND QUALITY REQUIREMENTS FOR INCENSES

V. C. 1. SAFETY AND QUALITY REQUIREMENTS

1. What are they?

The specifications⁴⁴ enclosed herein are intended to define the minimum requirements for incenses to provide a reasonable degree of safety during their normal use, thereby improving personal safety and reducing fires, deaths and injuries.

2. How are they analyzed?

Appearance is determined by visual and olfactory inspection of the incense sticks.

Moisture content is determined by weighting the incense sticks with an electronic balance before and after drying the incense sticks into an oven at 105°C for 1.5 h.

Straightness is determined by measuring the distance from the edge of a straight steel ruler to the most concave or most convex part of the incense stick.

Burning behaviour is determined by visual inspection during the incense burning process.

Burning time is determined by igniting the incense stick under the specific test conditions and recording the continuous time from ignition to extinguishment.

3. Which are the acceptable limits?

Parameter	Requirement	Method
Appearance	Incense surface must be free from mould, impurities, fractures, deformations or other defects	QB/T 1692.4
	Incense thickness must be uniform	
	Incense colour shade and intensity must be uniform	
	Incense must meet the specified fragrance	
Moisture content	≤ 10%	
Straightness	≤ 3% or 6% ⁴⁵	
Burning behaviour	No visible flame shall be generated after the flame is extinguished	
	Incense shall burn completely after ignition	
Burning time	Shall not be less than the indicated time	

⁴⁴ See definitions in Annex II.

⁴⁵ The straightness of incense stick shall not be greater than 3% of the total length except for bamboo incense (that shall not be greater than 6% of the total length).

VI. APPLICABLE REGULATIONS



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EUROPEAN UNION

- Directive 2001/95/EC on general product safety and its amendments.
- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its amendments.
- Regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) and its amendments.
- Directive 87/357/EEC; Decree n° 92-985 of 9 September 1992 relative to imitations of foodstuffs and its amendments.
- EN 15493–2019 “Candles. Specification for Fire Safety” and its amendments.
- EN 15494–2019: “Candles. Product Safety Labels and Warnings” and its amendments.
- EN 15426–2018: “Candles. Specification for sooting behaviour” and its amendments.
- EN 16738–2015: “Emission safety of combustible air fresheners. Test methods” and its amendments.
- EN 16739–2015 “Emission safety of combustible air fresheners. Methodology for the assessment of test results and application of recommended emission limits” and its amendments.
- EN 16740–2015: “Emission safety of combustible air fresheners. User safety information” and its amendments.

SPAIN

- Real Decreto 770/1999 on Technical and sanitary regulations for the preparation, circulation and trade of detergents and cleaners (B.O.E. 16.05.1999) and its amendments.

USA

- U.S. Clean Air Act.
- Federal Hazardous Substances Act.
- Toxic Substance Control Act (TSCA).
- 16 CFR 1303: Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint (under the U.S. Consumer Product Safety Act Regulation).
- California Proposition 65.
- California Air Resources Board (CARB).
- ASTM F2058–2014: “Standard Specification for Candle Fire Safety Labelling” and its amendments.
- ASTM F2179–2020: “Standard Specification for Annealed Soda-Lime-Silicate Glass Containers That Are Produced for Use as Candle Containers” and its amendments.
- ASTM F2417–2017: “Standard Specification for Fire Safety for Candles” and its amendments.
- ASTM F2601–2018: “Standard Specification for Fire Safety for Candle Accessories” and its amendments.
- ASTM F2326–04(2021): “Standard Test Method for Collection and Analysis of Visible Emissions from Candles as They Burn” and its amendments.



VI. APPLICABLE REGULATIONS

CANADA

- Candles Regulations (SOR/2016-165) under Canada Consumer Product Safety Act (CCPSA) and its amendments.
- Consumer Chemicals and Containers Regulations, 2001 (SOR/2001-269) under Canada Consumer Product Safety Act (CCPSA) and its amendments.
- Canadian Environmental Protection Act, 1999 (CEPA 1999) and its amendments.
- Canadian Chemical Inventory, Domestic Substances List (DSL).⁴⁶

CHINA

- GB 30000–2014: “Rules for classification and labelling of chemicals” and its amendments.
- GB 13690–2009: “General rule for classification and hazard communication of chemicals” and its amendments.
- GB/T 25322–2010: “Safety label of consumer product” and its amendments.
- QB/T 2119–2007: “Basic candle” and its amendments.
- QB/T 2902–2007: “Art candle” and its amendments.
- QB/T 2903–2007: “Jar candle” and its amendments.
- GB/T 22256–2008: “Jelly candle” and its amendments.
- QB/T 4359–2012: “Tea light candle” and its amendments.
- QB/T 1692.4–2010: “Incenses” and its amendments.
- GB 26386–2011: “General safety technical specification for burnable incense” and its amendments.

JAPAN

- Chemical Substances Control Law (CSCL).

REPUBLIC OF KOREA

- Safety and Labelling Standards for Products of Risk Concerns (Announcement MoE n° 2020-117, 2020.6.5 partially modified).

⁴⁶ The DSL, <http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=5f213fa8-1>, is the sole standard against which a substance is judged to be “new” to Canada. With few exemptions, all substances not on this list are considered new and must be reported prior to importation in order that they can be assessed to determine if they are toxic or could become toxic to the environment or human health. To ensure compliance with the DSL, Inditex’ Suppliers must ensure that all the substances used to manufacture home fragrances intended to be commercialized by any of the Inditex’ brands is listed on the DSL or is exempted from listing.



AUSTRALIA

- Australian Industrial Chemicals Introduction Scheme (AICIS). Industrial Chemicals Act 2019.
- Australia Trade Practices Act 1974, Consumer Protection Notice No 7 of 2002 on Lead content in candle wick.
- Competition and Consumer Act 2010 – Consumer Protection Notice no. 12 of 2011 on Permanent ban on combustible candle holders.
- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).⁴⁷

⁴⁷ To ensure compliance with the SUSMP, Inditex' Suppliers must ensure that any substance used to manufacture home fragrances intended to be commercialized by any of the Inditex' brands is not included in schedules 1-10 of SUSMP, unless present in concentrations below listing in the aforementioned schedules.

VII. OTHER REGULATIONS OF MANDATORY COMPLIANCE



i+Home Fragrances & Candles

Inditex Precautions and Limits for Users Safety
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VII. A. EU

VII. A. 1. REACH

1. What is it?

REACH is an European Union regulation that regulates 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 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.

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'⁴⁸ in higher amounts than 0,1% of the total weight of the "Products"; and
- (2) to justify the presence of SVHCs 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. CLP

1. What is it?

CLP is an European regulation that regulates the classification, labelling and packaging of substances and mixtures (Regulation (EC) No 1272/2008 of the European Parliament and Council). CLP introduces the United Nations Globally harmonized system (GHS) for classification and labelling of chemicals into Europe.

2. Is it of mandatory compliance?

CLP is a mandatory regulation for those suppliers that manufacture, distribute and/or supply to any of Inditex' brands any type of home fragrance or candle intended to be commercialized in any European Member State.

EU manufacturers and importers of substances or mixtures:

- shall classify, label and package substances and mixtures according to CLP before placing them on the market;
- shall notify the classification and labelling elements to the classification and labelling inventory established by ECHA;

⁴⁸ 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 1B); those persistent, bioaccumulating and toxic substances (PBT); those very persistent and very bioaccumulative substances (vPvB); 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>).



VII. OTHER REGULATIONS OF MANDATORY COMPLIANCE

- shall update the label following any change to the classification and labelling of that substance or mixture;
- shall submit a proposal to the Competent Authority if they have new information which may lead the change of harmonized classification and labelling and
- shall provide Safety Data Sheets (SDS) along the supply chain and update SDS when necessary.

VII. A. 3. 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,⁴⁹ which may be used in biocidal products,⁵⁰ the authorisation of biocidal products and the placing on the market of treated articles.⁵¹

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.

49 **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>)

50 **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.

51 **Treated article:** any substance, mixture or article which has been treated with, or intentionally incorporates, one or more biocidal products. For more information see the European Commission Guidance document on treated article.



VII. B. USA

VII. B. 1. VOLATILE ORGANIC COMPOUNDS CONTENT

1. What are they?

Volatile organic compounds (VOCs) are organic chemical compounds whose vapour pressures are high enough to evaporate and enter into the atmosphere under room temperature. More precisely, within the scope of this Standard, Volatile organic compounds (VOCs) means any volatile organic compound that participates in atmospheric photochemical reactions, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and those VOCs that have been determined to have negligible photochemical reactivity (see Annex IV).

The VOC content limits set out in this section shall not include any VOC that:

- has a vapour pressure of less than 0.1 millimetres of mercury at 20 degrees Celsius; or
- consists of more than 12 carbon atoms, if vapour pressure is unknown; or
- has a melting point above 20 degrees Celsius and does not sublime, if the vapour pressure is unknown.

2. Where can they be found?

VOCs may be present in a wide variety of industrial and consumer products, including home fragrances, cosmetics and cleaning products which, upon use, can emit VOCs inadvertently into the ambient air.

3. How are they analyzed?

The volatile organic compounds content is performed according to the A.R.B Method 310 “Determination of volatile organic compounds (VOC) in consumer products and reactive organic compounds in aerosol coating products” of the California Environmental Protection Agency. The formulation of the product must be used to calculate the VOC content.

4. Which are the acceptable limits?

Type of product ⁵²	Parameter	Maximum Limit	Method
Liquid home fragrances (including home sprays, reed diffusers and linen sprays)	VOCs content	18%	California EPA-A.R.B. Method 310
Solid/gel home fragrances (including scented candles, incenses, potpourri and scented bags and cards)		3%	

5. How can they be avoided?

Manufacturers need to pay close attention to the raw materials and the manufacturing process to ensure that the VOCs percentage in the final product does not exceed the VOCs content limit.

⁵² See definitions in Annex II.



VII. B. 2. 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 chemicals⁵³ 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 chemical list. However, the court decisions on Proposition 65 serve as a guideline for 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.

In the case of home fragrances, special attention must be paid to the following substances:

Type of product	Parameter	CAS No	Restriction
All types of home fragrances	Benzophenone	119-61-9	nd
	D-Pulegone	89-82-7	
	Estragole	140-67-0	
	Methyleugenol	93-15-2	
	Methyl isobutyl ketone (MIBK)	108-10-1	

53 http://oehha.ca.gov/prop65/prop65_list/Newlist.html



VII. C. REPUBLIC OF KOREA

VII. C. 1. SAFETY AND LABELLING STANDARDS FOR PRODUCTS OF RISK CONCERNS

1. What is it?

Safety and Labelling Standards for Products of Risk Concerns is a Korean regulation (under the Consumer Chemical Products and Biocides Safety Control Act) that regulates the chemical composition and labelling of several consumer products groups such as detergents, coatings and adhesives, home fragrances, dyes, and biocidal products, among others.

2. Is it of mandatory compliance?

Safety and Labelling Standards for Products of Risk Concerns is a mandatory regulation for those suppliers that manufacture, distribute and/or supply and sale aforementioned type of products in the Republic of Korea.

To meet the requirements of this regulation related to the home fragrances group the aforementioned Suppliers must control the restricted substances mentioned in Chapter 5-1 “Air fresheners” and Chapter 13-1 “Candles” of Annex 2. In addition, all substances included in the final formula used to eliminate, control or suppress harmful organisms in the air freshener (except candles) must be included in the positive list enclosed in section 4 of Chapter 5-1 of Annex 2 of the aforementioned regulation.



VII. C. 2. ACT ON REGISTRATION AND EVALUATION OF CHEMICALS (K-REACH)

1. What is it?

Act on Registration and Evaluation of Chemicals (K-REACH) is a Korean regulation that regulates the registration and evaluation of chemical substances and articles containing hazardous chemical substances.

2. Is it of mandatory compliance?

K-REACH is a mandatory regulation for those suppliers that manufacture, distribute and/or supply to any of Inditex' brands any product within the scope of this regulation intended to be commercialized in the Republic of Korea.

To meet the requirements of this regulation the suppliers should properly control and manage any phase (their own and/or subcontracted) of the products within the scope of this regulation with the aim to:

- (1) detect and avoid the presence of priority control substances in products in higher amounts than 0.1 % of the total weight of the products;
- (2) to notify to the Inditex Sustainability Department the presence of hazardous chemical substances if they are detected in the product and provide the corresponding 'Corrective Action Plan' for their elimination;
- (3) ensure that all substances present in mixtures are 'existing chemical substances' according to this Regulation; and
- (4) to notify to the Inditex Sustainability Department the presence of 'new chemical substances' in the mixture.

VIII. ANNEXES



i+Home Fragrances & Candles

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for Home Fragrances & Candles



ANNEX I. SUMMARY OF THE APPLICABLE REQUIREMENTS

SUMMARY OF THE APPLICABLE REQUIREMENTS FOR EACH TYPE OF PRODUCT

Chapter Reference	Parameters	Type of product				
		Non-burnable home fragrances ⁵⁴	Incenses	Scented Candles	Unscented candles	Accessories and containers
Chapter II. Inditex overall requirements	SDS	✓	✓	✓	✓	
	Classification and packaging	✓	✓	✓	✓	
	Product shape	✓	✓	✓	✓	✓
	Restricted chemical composition	✓	✓	✓	✓	
	Parameters for raw materials and additives			✓	✓	
	Fragrances	✓	✓	✓		
Chapter IV. Substances of legally limited use	Fragrance allergens	✓	✓	✓		
	Phthalates	✓	✓	✓	✓	
	Specific emissions		✓	✓		
	Aromatic solvent residues			✓	✓	
	Azo dyes			✓	✓	
	Metals		✓	✓	✓	
	PAHs			✓	✓	
	Soot index			✓	✓	
	Other restricted substances	✓	✓	✓		
Chapter V.A Safety requirements for candles	Specifications for fire safety			✓	✓	
Chapter V.B Safety requirements for candle containers and accessories	Safety requirements for candle containers					✓
	Safety requirements for candle accessories					✓
Chapter V.C. Safety and quality requirements for incenses	Safety and quality requirements		✓			

Continued on next page

⁵⁴ This category includes: reed diffusers, home fragrances in sprays, scented cardboard and scented sachets.



Chapter Reference	Parameters	Type of product				
		Non-burnable home fragrances ⁵⁴	Incenses	Scented Candles	Unscented candles	Accessories and containers
Chapter IX. Other regulations of mandatory compliance	REACH	✓	✓	✓	✓	✓
	CLP	✓	✓	✓	✓	
	BPR	✓	✓	✓	✓	
	VOCs content	✓	✓	✓		
	California Proposition 65	✓	✓	✓	✓	✓
	Safety and Labelling Standards for Products of Risk Concerns	✓	✓	✓	✓	
	K-REACH	✓	✓	✓	✓	✓

✓ Requirement applies for the specified product type

SUMMARY OF THE APPLICABLE REQUIREMENTS FOR EACH PART OF THE PRODUCT

Parameters	Non-burnable home fragrances ⁵⁵
Fragrance allergens	<u>Reed diffusers</u> : an homogeneous sample of the fragranced liquid.
Phthalates	<u>Home and linen spray</u> : an homogeneous sample of the fragranced liquid.
VOCs content	<u>Scented cards</u> : an homogeneous sample of the scented paperboard.
Other restricted compounds	<u>Scented sachets</u> : The sampling shall be performed as to obtain a representative sample of the whole sachet. Thus, the sample shall consist of an homogeneous and representative sample of all aromatic items contained in the scented sachet.

Parameters	Scented and unscented candles
Azo dyes	The sampling shall be performed as to obtain a representative sample of the whole candle. That is: – <u>Coloured candles</u> : a representative and homogeneous sample of each part of the wax that has different colour. – <u>Lacquered candles or candles with screen printed lacquer</u> : a representative and homogeneous sample of the lacquer.
Aromatic solvent residues	The sampling shall be performed as to obtain a representative sample of the whole candle. That is: – <u>Non-coloured and non-lacquered candles made of paraffin</u> : a homogeneous sample of the wax. – <u>Coloured candles</u> : a representative and homogeneous sample of each part of the wax that has different colour. – <u>Lacquered candles or candles with screen printed lacquer</u> : a representative and homogeneous sample of the lacquer. Additionally, if the candle is made of paraffin take a representative and homogeneous sample of the wax.
Fragrance allergens	<u>All types of candles</u> : The sample shall consist of an homogeneous sample of the wax.
Metals	The sampling shall be performed as to obtain a representative sample of the whole candle. That is: – <u>Non coloured candles</u> : a homogeneous sample of the wax. – <u>Coloured candles</u> : a representative and homogeneous sample of each part of the wax that has different colour. – <u>Lacquered candles or candles with screen printed lacquer</u> : a representative and homogeneous sample of the lacquer and of the candle wax.

Continued on next page

55 This category includes: reed diffusers, home fragrances in sprays, scented cardboard and scented sachets.



Parameters	Scented and unscented candles
PAHs	<p>The sampling shall be performed as to obtain a representative sample of the whole candle. That is:</p> <ul style="list-style-type: none"> – <u>Non coloured candles made of paraffin</u>: a homogeneous sample of the wax. – <u>Coloured candles</u>: a representative and homogeneous sample of each part of the wax that has different colour. – <u>Lacquered candles or candles with screen printed lacquer</u>: a representative and homogeneous sample of the lacquer. Additionally, if the candle is made of paraffin take a representative and homogeneous sample of the wax.
Phthalates	<p>The sampling shall be performed as to obtain a representative sample of the whole candle. That is:</p> <ul style="list-style-type: none"> – <u>Coloured candles</u>: a representative and homogeneous sample of each part of the wax that has different colour. – <u>Lacquered candles or candles with screen printed lacquer</u>: a representative and homogeneous sample of the lacquer.
VOCs content	<u>All types of candles</u> : The sample shall consist of an homogeneous sample of the candle.
Other restricted compounds	<u>All types of candles</u> : The sample shall consist of an homogeneous sample of the wax.

Parameters	Incenses
Fragrance allergens	<p>An homogeneous sample of the aromatic material made of aromatic plant materials.</p>
Metals	
Phthalates	
VOCs content	
Other restricted compounds	



ANNEX II. DEFINITIONS

DEFINITIONS

Aftersmoking after extinguishing

After the flame has been extinguished, the tip of the wick continues to glow for some time by its very nature. Aftersmoking is associated with a releasing trail of smoke.

Annealing

Annealing is a controlled slow-cool heat treatment of glass. Glass is annealed in order to reduce the residual stresses in glassware. The annealing process is critical for the durability of glass because poorly annealed glass with large residual stresses break easily.

Art candle

Candle which passes through special manual treatment and has special surface effect or is in irregular profile.

Basic candle

Candle with regular symmetric simple geometrical shape, that is processed from paraffin wax and/or vegetable wax mainly for burning and lighting.

Bees wax

Beeswax is the substance secreted by honeybees when they construct their honeycombs, and is obtained by melting the empty comb in boiling water. It is stickier than other waxes and its composition varies slightly according to the geographical location and diet of the bees. It is a relatively soft wax, but has a relatively high melting point.

Burn cycle

The length of time a candle burns from when it is lit to when it is manually extinguished or from when it is lit until it extinguishes on its own at end of useful life.

Burning behaviour

This is a basic requirement to evidence a correct manufacture of the candle. If the candle is properly manufactured, after being lit, it will show a bright calm flame, without noise and gradually form a cup rim surrounding the so-called burning bowl. The candle must burn evenly. The flame burns without visible release of soot and self-extinguishing.

Calibre

The calibre is the measurement of the diameter of the tea light cups.

Candle

One or more wicks supported by a solid, semi-solid or quasi-rigid combustible material at room temperature (20 to 27°C), whose combined function is to maintain a luminous flame. Candles may be scented or unscented. Candles may also contain additives used for colouring, stabilizing or modifying the combustion characteristics.

Candle accessory

Object designed, intended, or marketed for use with a candle.

Candle burner

Candle holder that has an enclosed, but vented, area in which to put a candle, said candle providing a source of heat or light or both.

**Candle holder**

Candle accessory onto which a candle is placed. It may support, hold or contain a candle when in use.

Container integrity

This requirement is intended to minimize the hazards of break of candle containers.

Candle flashover

Condition where the base material's vapours (i.e., vapours coming from intended fuel source for candle flame) ignite over the entire fuel pool.

Candle ring

Candle accessory intended to surround the candle with decorative materials in proximity to a candle, including, but not limited to, a continuous ring or loose fill material.

End of useful life

Condition when the candle ceases to support combustion and the flame goes out on its own, as designed, and cannot be re-lit.

Filled candle (i.e., container candle or jar candle)

A candle produced and used within the same container or vessel.

Flame height

Candle flame height is the distance between the base of the flame and the top of the flame. Excessive candle flame heights can increase the risk of fires when using candles; therefore, this feature shall be monitored closely by manufacturers and retailers.

Flame impingement

Situation where the flame makes contact with a candle (i.e., freestanding candle) supporting surface at the end of useful life.

Flammability

Requirement intended to determine the capability of a candle container or accessory to sustain flame on or over the surface of the specimen.

Floating candle

A candle that when placed in water displaces more water by weight than the weight of the candle and floats.

Fragrance

A substance or mixture of aroma chemicals, natural essential oils and other functional components that is added to a consumer product to impart an odour or scent, or to counteract a malodour.

Freestanding candle

A rigid candle that is intended to be burned outside a container and does not require a holder to keep it upright, excluding votive candles.

Home spray

A glass, metal or plastic recipient provided with a valve and containing a fragrance in solution, not under pressure.



The valve is opened by pressing down a spray nozzle, releasing the fragrance into the air by aspiration through a tube connected to the spray nozzle. Home sprays fall into the scope of “non-burnable home fragrances”.

Incense

Aromatic material which releases fragrant smoke when burned. Incense is composed of aromatic plant materials (dried herbs or wood), often combined with essential oils. Incenses fall into the scope of “burnable home fragrances”.

Jelly candle (i.e., gel-containing candle)

Candle where the primary fuel is a liquid, such as mineral oil, terpene type chemicals, or modified hydrocarbons that are not mineral oil based, which may or may not contain organic functional groups; it also contains a chemical agent to increase viscosity to a point where the candle has a quasi-rigid property.

Linen spray

Home spray specially designed for textile treatment.

Melting point (cooling curve)

The melting point is the temperature at which the solid and liquid phases of wax can exist in equilibrium.

Paraffin wax

Paraffin wax is a petroleum by-product. It is composed primarily of straight-chained, saturated hydrocarbons, and is removed from petroleum during the refining process. It is a relatively hard wax and comes in a variety of melting points, which allows it to be used for many different types of candles.

Potpourri burner (i.e., wax melts and oil burners)

Candle burner designed to provide a source of heat to warm a reservoir of extraneous material.

Potpourri

A mixture of dried, naturally fragrant plant material, used to provide a gentle natural scent inside buildings, most commonly in residential settings. It is usually placed in a decorative (often wooden) bowl, or tied in small sachet made from sheer fabric.

Reignition after extinguishing

Spontaneous self-ignition of the wick after it has been extinguished.

Reed diffuser

A diffuser consisting of a vessel (generally made of glass), a fragrance, a base fluid and reed diffuser sticks that allows essential oils to be dispersed into the air. Reed diffusers use fragranced liquids composed of essential or fragrance oils mixed with a dispersing fluid base; the liquid seeps up through the reeds, allowing the release of the fragrance into the air. Reed diffusers fall into the scope of “non-burnable home fragrances”.

Screen printing

Screen printing is a technique used to apply ink directly on the surface to be printed (substrate). The image to be printed is photographically transferred to a very fine fabric (the screen) such that the non-printing areas are blocked off and the fabric serves as a stencil.

Scented candle

Candle formed by a combustible material to which a fragrance has been added, intended to be released into the air, whose main purpose is to mask odours, refresh or perfume the air. Scented candles fall into the scope of “burnable home fragrances”.



Scented card

Card containing a fragrance intended to be released into the air, whose main purpose is to mask odours, refresh or perfume the air. Scented cards fall into the scope of "non-burnable home fragrances".

Scented sachet

A soft bag containing perfumed or aromatic items such as herbs, potpourri or other aromatic ingredients whose main purpose is to mask odours, refresh or perfume the air. Scented sachets fall into the scope of "non-burnable home fragrances".

Secondary ignition

Self-sustained flame other than that on the intended wick(s) that occurs during candle use, including candle flashover.⁵⁶ Secondary ignition may result in damaged candles, elevated fuel pool temperatures, excessively rapid base material consumption and unintended flames. In addition, candles with coatings or paints applied to the outside of the product are susceptible to the secondary ignition of this coating or paint.

Stability

This safety requirement is intended to minimize the hazards of candle tip over. The unlit candle shall not tip over when placed at a 10° incline from horizontal.

Stability while burning

This safety requirement is intended to minimize the hazards of candle tip over. The candle shall not tip over when placed on a level surface while burning.

Stearin wax

This wax is derived from the long-chained saturated fatty acids found in animal fats and vegetable oils. Stearin is relatively hard and opaque, and typically is comprised primarily of stearic and palmitic acids.

Surface temperature

The surface temperature is the temperature of the candle container while the candle is burning.

⁵⁶ If the wick curls over during the burning of the candle such as that the wick and the tip are both touching the melt pool but the wick only has one flame it is not to be interpreted as secondary ignition unless two or more separate flames can be distinguished on the same wick.



Tea light

Cylindrical candle that is burned up in a container which may be suitable to keep vessels containing coffee, tea or other liquids warm, by using a warming stove. A tea light container can be made from metal, glass or plastic. Typical dimensions of a tea light are 38 mm in diameter and 15 mm in height.

Thermal shock resistance

Thermal shock resistance is the property of a material to withstand sudden and rapid temperature changes.

Unscented candle

Candle without aromatic additives, which the main purpose is decor and/or for ambient lighting.

Votive candle

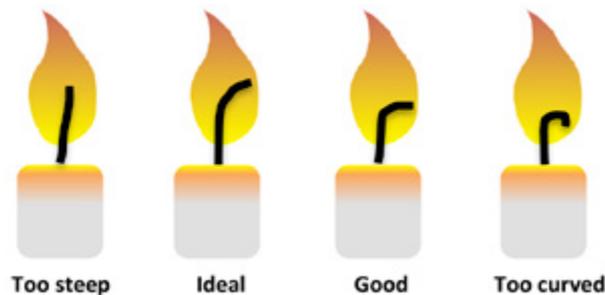
A candle produced for use fully within a candle accessory, specifically, a votive holder.

Wick eccentricity

Wick eccentricity is the deviation of the candle wick from the centre of the candle.

Wick medium curvature

Condition when the wick bends evenly to the outer edge of the flame, adopting a slight curvature according to the figure 2 (ideal curvature) or figure 3 (good curvature):



Wick posture

The wick posture is the shape of the wick during the candle burning process. A right curvature of the candle wick may prevent several problems concerning the burning behaviour.



ANNEX III. CANDLES: RECOMMENDED PARAMETERS FOR RAW MATERIALS AND ADDITIVES

RECOMMENDED PARAMETERS FOR RAW MATERIALS AND ADDITIVES

1. Requirements for paraffin wax

Parameter		Limit / Requirement	Test method
Ash content		≤ 0.1%	ISO 6245
Hydrogenation quality (Saybolt colour index)		≥ +24	ASTM D 156 or DIN 51411
Lead		0.2 ppm	ICP-MS
Odour		≤ 2.0	ASTM D 1833
PAHs	Paraffin waxes	nd	FDA 172.886 (UV-Vis)
	Microcrystalline waxes	nd	Ph. Eur. 7th Ed. monograph 1034
Solvent residues		Toluene: ≤ 5.0 ppm Benzene: ≤ 0.5 ppm	EFW METHOD 002/03 (Headspace -- GC)
Sulphur Content		≤ 20.0 ppm	EN ISO 20884 or ASTM D 2622
UV Stability (Saybolt colour index)		≥ +15 or +5 ⁵⁷	ASTM D 156

2. Requirements for stearin wax

Parameter	Limit / Requirement	Test method
Acid number	195-215	DGF C-V 2
Ash content	≤ 0.1%	DGF C-III 10
Congealing point / Titre	52 – 61°C	DGF C-IV 3c
Ester number	≤ 2.0	DGF C-V 4
Iodine number	≤ 1	DGF C-V 11d
Lead	0.1 ppm	ICP-MS
Lovibond Tint Index (FF 5¼")	≤ 5.0 yellow ≤ 1.0 red	DGF C-IV 4b
Non-saponifiable matter	≤ 1%	DGF C-III 1a-1b
Peroxide number	≤ 10	DGF C-VI 6a

3. Requirements for bees wax

Parameter	Limit / Requirement	Test method
Acid number	17 – 24	DAB 10
Dripping point	61 – 65°C	
Ester number	70 – 80	
Lead	0.1 ppm	ICP-MS
Ratio number	3.3 – 4.3	DAB 10
Saponification - number	87 – 104	
Total hydrocarbons	≤ 18%	DGF M-V 6

57 Saybolt colour index ≥ +15 for paraffin waxes with oil content equal or less than 1.5%.

Saybolt colour index ≥ +5 for paraffin waxes with oil content higher than 1.5%.


4. Requirements for fats and oils

Parameter		Limit / Requirement	Test method
Ash content		≤ 0.1%	DGF C-III 10
Free fatty acids (FFA)		≤ 2%	DGF C-V 2
Metal content	Arsenic (As)	≤ 0.1 ppm	DIN EN 13805 DIN EN 15763
	Cadmium (Cd)	≤ 0.1 ppm	
	Copper (Cu)	≤ 0.1 ppm	
	Iron (Fe)	≤ 1 ppm	
	Lead (Pb)	≤ 0.1 ppm	
	Mercury (Hg)	≤ 0.1 ppm	
	Nickel (Ni)	≤ 2 ppm	
Lovibond Tint Index (FF 5¼")		≤ 3.5 red	DGF C-IV 4b
Odour		No distinctly noticeable atypical odours	DGF C-III
Oil stability index (OSI) at 120°C		OSI value for reference only	ISO 6886
Peroxide number		≤ 10	DGF C-VI 6a
Water content		≤ 0.15%	DGF C-III 13a or 13b

5. Requirements for candle colours and lacquers

Parameter		Limit / Requirement	Test method
Colour and lacquer formulations classified as: ⁵⁸		Usage ban	–
Acute toxicity	Category 1, 2, 3 or 4		
Carcinogenicity	Category 1A, 1B or 2		
Germ cell mutagenicity	Category 1A, 1B or 2		
Reproductive toxicity	Category 1A, 1B or 2		
Colour and lacquer formulations containing azo dyes that may decompose into one or more of the aromatic amines listed in (EC) No. 1907/2006		Usage ban	–
Metal content	Arsenic (As)	10 mg/kg	ICP-MS
	Barium (Ba)	100 mg/kg	
	Cadmium (Cd)	10 mg/kg	
	Chromium (Cr)	400 mg/kg	EN 71-3
	Lead (Pb)	20 mg/kg	ICP-MS
	Nickel (Ni)	10 mg/kg	
Phthalates (DEHP, DBP, BBP, DINP, DIDP, DNOP and DIBP)		0.1% (for each phthalate)	DIN EN 15777 (GC-MS)

⁵⁸ Candle colours and lacquers classified according to Regulation (EC) No. 1272/2008 (CLP Regulation).



6. Requirements for wicks

Parameter	Limit / Requirement	Test method
Material	Wicks must consist of uniform, tear-resistant yarn made of medium-stapled and long-stapled fibres on cellulosic basis ⁵⁹	-
	Cotton used for wick manufacture shall fulfil the criteria of Inditex' Standard Clear to Wear (CTW)	

⁵⁹ Other materials may be used for supporting threads if their intended use as candle wick is in line with the aspects of preventive health protection.



ANNEX IV. VOLATILE ORGANIC COMPOUNDS

VOLATILE ORGANIC COMPOUNDS

Volatile organic compounds (VOCs) are organic chemical compounds whose vapour pressures are high enough to evaporate and enter into the atmosphere under room temperature. More precisely, within the scope of this Standard, Volatile organic compounds (VOCs) means any volatile organic compound that participates in atmospheric photochemical reactions, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and the following VOCs, which have been determined to have negligible photochemical reactivity:

Substance
Methane
Ethane
Methylene chloride (or dichloromethane)
1,1,1-trichloroethane (or methyl chloroform)
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
Trichlorofluoromethane (CFC-11)
Dichlorodifluoromethane (CFC-12)
Chlorodifluoromethane (HCFC-22)
Trifluoromethane (HFC-23)
1,2-Dichloro 1,1,2,2-tetrafluoroethane (CFC-114)
Chloropentafluoroethane (CFC-115)
1,1,1-Trifluoro 2,2-dichloroethane (HCFC-123)
1,1,1,2-Tetrafluoroethane (HFC-134a)
1,1-Dichloro 1-fluoroethane (HCFC-141b)
1-Chloro 1,1-difluoroethane (HCFC-142b)
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
Pentafluoroethane (HFC-125)
1,1,2,2-Tetrafluoroethane (HFC-134)
1,1,1-Trifluoroethane (HFC-143a)
1,1-Difluoroethane (HFC-152a)
Parachlorobenzotrifluoride (PCBTF)
Cyclic, branched or linear completely methylated siloxanes
Acetone
Perchloroethylene (or tetrachloroethylene)

Continued on next page



Substance
3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
1,1,1,2,3,4,4,5,5,5-Decafluoropentane (HFC 43-10mee)
Difluoromethane (HFC-32)
Ethylfluoride (HFC-161)
1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)
1,1,2,2,3-Pentafluoropropane (HFC-245ca)
1,1,2,3,3-Pentafluoropropane (HFC-245ea)
1,1,1,2,3-Pentafluoropropane (HFC-245eb)
1,1,1,3,3-Pentafluoropropane (HFC-245fa)
1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)
1,1,1,3,3-Pentafluorobutane (HFC-365mfc)
Chlorofluoromethane (HCFC-31)
1-Chloro-1-fluoroethane (HCFC-151a)
1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)
1,1,1,2,2,3,3,4,4-Nonafluoro-4-methoxy-butane (C ₄ F ₉ OCH ₃)
2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF ₃) ₂ CFCF ₂ OCH ₃)
1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C ₄ F ₉ OC ₂ H ₅)
2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF ₃) ₂ CFCF ₂ OC ₂ H ₅)
Methyl acetate and perfluorocarbon compounds that fall into the following classes, namely:
i. cyclic, branched or linear completely fluorinated alkanes,
ii. cyclic, branched, or linear completely fluorinated ethers with no unsaturation,
iii. cyclic, branched or linear completely fluorinated tertiary amines with no unsaturation, and
iv. sulfur containing perfluorocarbons with no unsaturation and with sulfur bonds only to carbon and fluorine.



ANNEX V. INDITEX PROTOCOLS

ITX-CANDLES PROTOCOL

Protocol specified for the burning performance to be done in order to check the following parameters:

- Burning behaviour
- Flame height
- Candle stability while burning
- Container integrity
- Secondary ignition
- End of useful life
- Reignition after extinguishing
- Aftersmoking
- Flame impingement
- Wick posture

Number of samples required: a minimum of 4 identical candles must be evaluated. However, if the candle to be tested has a coating on its surface that is not separated from the candle flame by a technological barrier, 24 identical candles shall be evaluated.

Environmental conditions: keep the burning area environmentally controlled (temperature shall be maintained between 20 and 25°C) with minimal disturbance of the flames under test. Draughts affect the flame height and thus, shall be minimized.

Sample preparation: Remove the label, place the candle wick in a straight/upright position and trim the wick in accordance with the label instructions.

Space between samples: The candles shall be separated by the distance specified in the manufacturer's instructions.⁶⁰ If the manufacturer does not specify anything, the samples shall be arranged without any distance between them. The specified distance between samples does not apply to floating candles.

Procedure: The sample candles are lit and allowed to be burned until the end of useful life in different burning cycles, depending on the candle size, with periodic observation. For filled candles and candles marketed as self-extinguishing, the burning test must continue until self-extinguishing to evaluate "end of useful life" and "container integrity" parameters. For freestanding candles the burning test must continue until the end of useful life to evaluate the "flame impingement" parameter. Periodic observation must be performed as follows:

- **All the parameters (except flame height):** A visual inspection must be made 5 and 15 minutes after ignition. Additionally, the burning candles must be checked at least at hourly intervals throughout the burning period, at extinguishing and at self-extinguishing, when applicable.
- **Flame height parameter:** this parameter must be measured at specific intervals and recorded before extinguishing in each burning cycle. Flame height must be measured 5 minutes, 30 minutes and 1 hour after ignition and 5 minutes before extinguishing in each burning period. For candles with a total burning time less than one specified burning period, the flame height is measured and recorded at least twice. If the flame appears to approximate the maximum allowable flame height at other times, it shall also be measured.

⁶⁰ If the specified distance for tea lights is > 5 cm, they shall be arranged with a distance of 5 cm between them regardless of the instructions.



Burning cycles

- **Tea lights:** Burn the tea lights to the end of useful life in one continuous burn until self-extinguishing.⁶¹

- **Jelly candles:**

Burn the candle for 8 hours. At the end of the burn cycle, extinguish the candle and allow to cool for 1 hour minimum. Repeat the burning cycle until the candle reaches the end of useful life.

- **Basic and art candles:**

Burn the candle for 4 hours. At the end of the burn cycle, extinguish the candle and allow to cool for 1 hour minimum. Repeat the burning cycle until the candle reaches the end of useful life.

- **Filled and floating candles:**

Burn the candle for 4 hours. At the end of the burn cycle, extinguish the candle and allow to cool for 1 hour minimum. Repeat the burning cycle until self-extinguishing.

- **Candles marketed as self-extinguishing**

Burn the candle for 4 hours. At the end of the burn cycle, extinguish the candle and allow to cool for 1 hour minimum. Repeat the burning cycle until self-extinguishing.

61 If the burning time is longer than marked on the product, when the candle melts completely, the temperature of the molten bath shall be periodically measured with thermocouple, the temperature shall be measure at the place 5 - 7 mm from the wick and the place at least 2 - 4 mm from the candle surface.



ANNEX VI. COMMITMENT TO COMPLY WITH INDITEX GROUP'S i+HOME FRAGRANCES & CANDLES STANDARD

COMMITMENT TO COMPLY WITH INDITEX GROUP'S i+HOME FRAGRANCES & CANDLES STANDARD

I hereby confirm that:

- 1) We have received the Inditex Precautions and Limits for Users Safety for i+Home Fragrances & Candles (hereinafter, **i+HF&CND**), we have read it and thoroughly understand its implications.
- 2) We acknowledge that compliance with **i+HF&CND** is a contractual obligation and undertake, accordingly, to meet the **i+HF&CND** 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+HF&CND** implications to the whole production line.
- 4) The Inditex Group:
 - Reserves the right to check: i) compliance with **i+HF&CND** 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+HF&CND**.
 - Reserves the right to cancel any order for any goods where a non-compliance with **i+HF&CND** regarding any test and/or inspection has been established.
 - Reserves the right to return any orders already delivered where a non-compliance with **i+HF&CND** 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+HF&CND**.
 - Holds the Supplier as solely responsible for any and all damages caused by goods failing to comply with **i+HF&CND**;

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.

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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 in [the Inditex Supplier Extranet](#)

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