

# H&M GROUP CHEMICAL RESTRICTIONS 2021 restricted substances list (rsl)

**Cosmetic Products** 

Global Product Compliance Department Valid for all brands in the H&M Group.



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# 1. General

H&M Group has with concern for the health of customers as well as for the environment and working conditions, established H&M Group Chemical Restrictions for all products.

H&M Group Chemical Restrictions consists of 12 stand-alone parts which are divided on product type; Aerosols Dispensers, Textile products/Accessories/Footwear/Bags and Belts, Candles, Chemical Products, Cosmetic Products, Electrical and Electronic Products and Batteries, Food Contact Products, Furniture, Hardline, Medical Devices, Non-Commercial Goods (NCG)/Construction and Packaging, Toys.

Always follow all relevant latest parts of H&M Chemical Restrictions.

# The official and valid version of this document is in English. Any translation of the document is prepared for reference only. H&M accepts no liability for any mistakes done in the translation.

All chemical requirements, restrictions and test methods for cosmetic products are found in H&M Group Chemical Restrictions for Cosmetic Products. If the product is sold in a packaging, then the package must also comply with H&M Chemical Restrictions for Non-Commercial Goods (NCG)/Construction and Packaging. A cosmetic formulation in an aerosol container must also comply with the requirements for Aerosol Dispensers. A child appealing package may also be classified as a Toy and must then comply with H&M Chemical Restrictions for Toys.

Each limit in H&M Chemical Restrictions is valid for homogeneous parts of the concerned product if not otherwise stated.

Relevant test methods are specified in each part of the H&M Chemical Restrictions. In case of undated test method, the latest version is valid.

# 2. Commitment

By accepting H&M Standard Purchase Conditions, the Supplier commits to comply with H&M Chemical Restrictions. It is the Supplier's responsibility to assure compliance with H&M Chemical Restrictions and to inform all their upstream suppliers and subcontractors about the content of H&M Chemical Restrictions.

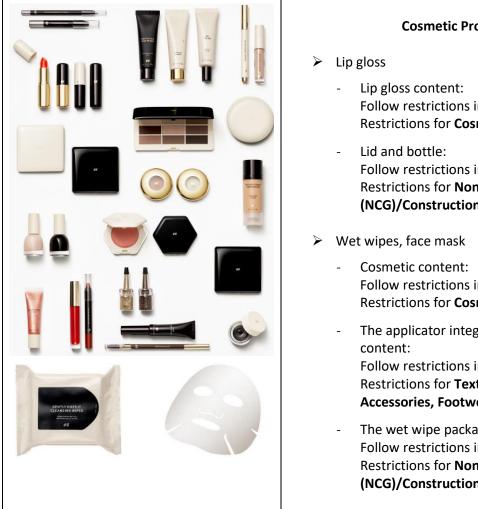
By accepting H&M Standard Purchase Conditions, each Supplier acknowledges that H&M reserves the right to:

- Inspect and test any product, any part of production and/or packaging, by any listed or appropriate method, at any time or at any stage of production.
- Cancel the Order, or, if the products are already delivered, return the products to the Supplier if the product, production and/or packaging do not correspond to the H&M Chemical Restrictions.
- Hold the Supplier responsible for any damage caused by the ordered product if the product, production and/or packaging do not correspond to the H&M Chemical Restrictions.
- Receive the Safety Data Sheets (SDS) for all substances and preparations (dyes, colorants, solvents, chemicals etc.) used in the production of a specific Order.

In the case of contradictory test results, H&M test results will prevail.

# **3. Examples**

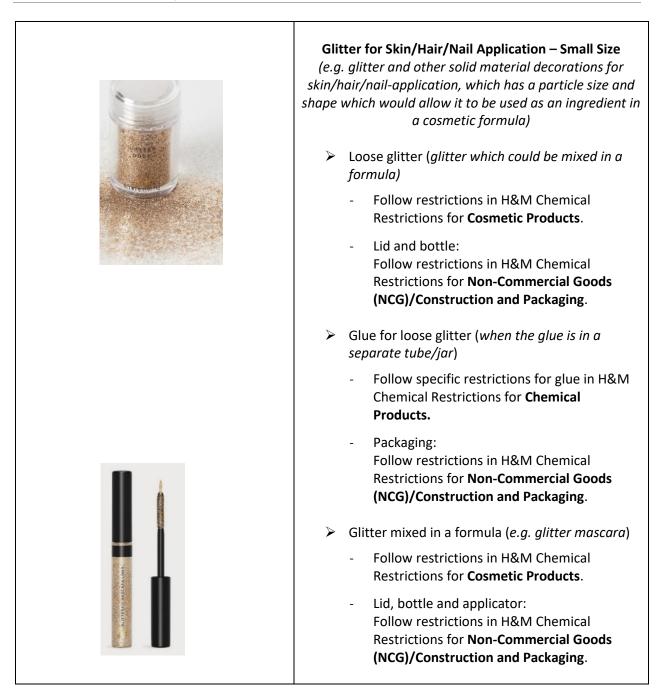
All details on the product must comply with H&M Chemical Restrictions, see examples below. The examples do not claim to be complete.

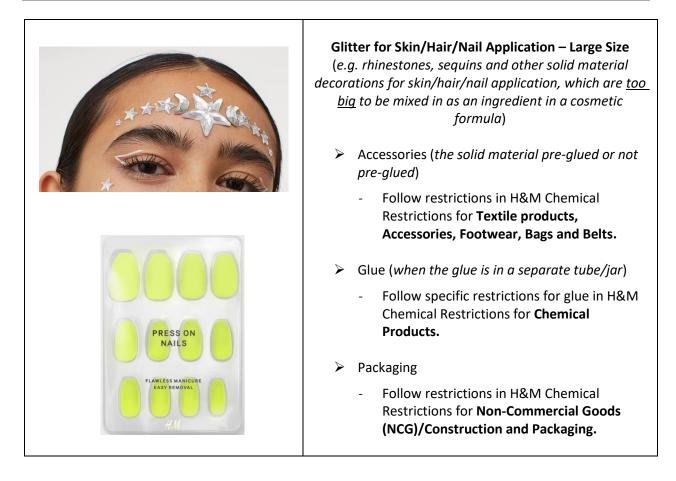


#### **Cosmetic Products**

- Follow restrictions in H&M Chemical Restrictions for Cosmetic Products.
- Follow restrictions in H&M Chemical Restrictions for Non-Commercial Goods (NCG)/Construction and Packaging.
- Follow restrictions in H&M Chemical Restrictions for Cosmetic Products.
- The applicator integrated with the cosmetic Follow restrictions in H&M Chemical Restrictions for Textile products, Accessories, Footwear, Bags and Belts.
- The wet wipe packaging: Follow restrictions in H&M Chemical Restrictions for Non-Commercial Goods (NCG)/Construction and Packaging.

	<ul> <li>Child Appealing and Children Cosmetic</li> <li>Lip balm         <ul> <li>Lip balm content: Follow restrictions in H&amp;M Chemical Restrictions for Cosmetic Products.</li> <li>Lid and bottle: Follow restrictions in H&amp;M Chemical Restrictions for Non-Commercial Goods (NCG)/Construction and Packaging.</li> <li>Lid and bottle could also be classified as toy: Follow restrictions in H&amp;M Chemical Restrictions for Toys.</li> </ul> </li> </ul>
GET A GRIP DRY MAIRS PRAY Mixture of the Bring a void life The Mine of the	<ul> <li>Aerosol Dispensers</li> <li>Cosmetic product in aerosol dispenser         <ul> <li>Follow restrictions in H&amp;M Chemical Restrictions for Cosmetic Products.</li> <li>Follow restrictions in H&amp;M Chemical Restrictions for Aerosol Dispensers.</li> <li>Follow restrictions in H&amp;M Chemical Restrictions for Non-Commercial Goods (NCG)/Construction and Packaging.</li> </ul> </li> </ul>
	<ul> <li>Accessories         <ul> <li>(e.g., make-up tools)</li> </ul> </li> <li>Accessories (e.g., make-up tools)</li> <li>Follow restrictions in H&amp;M Chemical             Restrictions for Textile products,             Accessories, Footwear, Bags and Belts.</li> </ul>





# 4. Definitions

Concentration Limit	The substance must not be present in the product at concentrations above this limit.
Children Cosmetic Products	Cosmetic products intended for children (age 0-14). Products can be used by children, or used by an adult on children.
Exposure Limit	The substance must not be present in the finished product at concentrations which will result in customer exposure above the limit; at normal and reasonable foreseeable use of the product.
Guidance Limit	If the substance is present in the product at a concentration above this limit, then the toxicological safety evaluation must explicitly secure that this specific concentration is safe under normal and reasonable foreseeable use of the product.
High Volatile Organic Compound (HVOC)	HVOC is any organic compound that exerts a vapour pressure greater than 80 mm Hg at 20°C.
Homogeneous	Uniform composition throughout, <i>i.e.</i> a material that cannot be mechanically disjointed into different materials.
Medium Volatile Organic Compound (MVOC)	MVOC is any organic compound that exerts a vapour pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20°C.
Not Detected	The substance must not be present in the finished product at concentrations above the analytical reporting limit.
Usage ban	The substance must not be used in production and it must not be added to the product. <sup>1</sup>
VOC	Volatile organic compounds (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

<sup>&</sup>lt;sup>1</sup> Impurities at low concentrations of these substances may be accepted only if technically unavoidable due to e.g. raw materials, formation in the manufacturing process, storage or packaging.

# 5. Abbreviations

CAS number	Chemical Abstracts Service number, an identification number for chemicals in this database.
CFR	Code of Federal Regulations
cfu	Colony forming units. The content of bacteria, mould and yeast in a product is measured by counting the number of colonies formed in the sample. This is the unit for this counting.
CI no	Colour Index number
GMP	Good Manufacturing Practice
HVOC	High Volatile Organic Compound
MVOC	Medium Volatile Organic Compound
PDRC	H&M Production and Documentation Requirements for Cosmetic products
ppm	Parts per million, which is the same as mg/kg.
Percentage	Percentage is weight by weight, % w/w
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
VOCs	Volatile Organic Compounds

# 6. Requirements – All Cosmetic Products

Requirement/Restricted substance	Limit/Requirement	
EU Cosmetic Regulation <sup>2</sup>	All cosmetic products must comply with the EU Cosmetic	
	Regulation.	
<b>Cosmetic Ingredients - Requirements for</b>		
-	t fulfil the purity requirements and other specifications given in	
the Cosmetic Ingredients - Requirements		
	equirements for Cosmetic products <sup>3</sup> (PDRC)	
	h includes requirements for: good manufacturing practices	
	sun protection factor testing, product information file (PIF) with	
cosmetic product safety report (CPSR), and	nd REACH reporting.	
The H&M RSL and the cosmetic product s	safety must always be considered in combination to secure that	
each substance (ingredient or impurity) of	concentration is below both the RSL limit and is evaluated as safe	
for the specific product type.		
Microbiological Quality		
For products specifically intended to be u	used in the eye area <sup>4</sup> , on mucous membranes <sup>5</sup> , or for children	
under 3 years of age and for products with	th non-woven material integrated with the formulation, for	
example wet wipes:		
Total viable count for aerobic	< 100 CFU/g or CFU/ml	
mesophilic microorganisms (ISO 21149)		
Pseudomonas aeruginosa (ISO 22717)		
Staphylococcus aureus (ISO 22718)	Not detected	
Candida albicans (ISO 18416)		
For other products than those specified a	above:	
Total viable count for aerobic	< 1000 CFU/g or CFU/ml	
Mesophilic microorganisms (ISO 21149)		
Pseudomonas aeruginosa (ISO 22717)		
Staphylococcus aureus (ISO 22718)	Not detected	
Candida albicans (ISO 18416)		
Colorants	The only colorants permitted are listed in 9. Permitted	
	Colorants in Cosmetic products.	
UV filters in cosmetic products	The only UV filters <sup>6</sup> permitted are listed in <i>10. Permitted UV</i>	
·	filters in Cosmetic Products.	
Preservatives	The only preservatives permitted are listed in	
	11. Permitted Preservatives in Cosmetic products.	

A product consisting only of solid material is a cosmetic product: If the solid material could be part of a cosmetic formula (as an ingredient) and it is applied as a cosmetic product, and fulfils the function and the application site as defined in the EU Cosmetic Regulation.

<sup>&</sup>lt;sup>2</sup> Regulation (EC) No 1223/2009 on cosmetic products.

<sup>&</sup>lt;sup>3</sup> Suppliers may download the document at H&M group Supplier Portal.

<sup>&</sup>lt;sup>4</sup> Eye area includes eye lid, eye lashes, and the area below the eye down to the cheek bone.

<sup>&</sup>lt;sup>5</sup> Mucous membranes include the intimate/genital area and the oral cavity of the mouth.

<sup>&</sup>lt;sup>6</sup> UV filters have the function to protect the skin. This restriction does not apply to UV absorbers which protect the formula.

# 7. Restrictions per Formula

# 7.1 Phase-Out List

<b>Restricted substance</b> <i>CAS number</i>	Limit/Requirement	Valid from date
Butylphenyl methylpropional 80-54-6	Usage ban	For new development valid from order placement date 1 December 2020.
		For re-order products valid from order placement date 1 May 2021.
Methoxyethyl acrylate 3121-61-7	Usage ban	For new development valid from order placement date 1 December 2020.
		For re-order products valid from order placement date 1 May 2021.
Sodium hydroxymethylglycinate 70161-44-3	Usage ban	For new development valid from order placement date 1 December 2020.
		For re-order products valid from order placement date 1 May 2021.

### 7.2 Impurities

#### 7.2.1 For All Countries

Restricted substance CAS number	Limit/Requirement
Antimony (Sb), total amount 7440-36-0	
In products containing polyester ingredient	Polyester ingredient: ≤ 260 ppm <sup>7</sup> + Formula without polyester ingredient: 5ppm <sup>8</sup>
In all other types of products	5 ppm <sup>8</sup>
Arsenic (As), total amount 7440-38-2	3 ppm
Cadmium (Cd), total amount 7440-43-9	3 ppm
Chromium VI (Cr <sup>6+</sup> ) 18540-29-9	Not detected
Cobalt (Co), total amount 7440-48-4	10 ppm <sup>8</sup>
Formaldehyde 50-00-0	
In all products except where originated from Formaldehyde releasers, total content of formaldehyde	Not detected
In rinse-off products where formaldehyde is originated from Formaldehyde releasers <sup>9</sup>	< 0.05% (500 ppm) free or possible release of formaldehyde (calculated content)
Lead (Pb), total amount 7439-92-1	5 ppm
Mercury (Hg), total amount 7439-97-6	1 ppm
Nickel (Ni), total amount 7440-02-0	10 ppm <sup>8</sup>

#### 7.2.2 For South Korea

Restricted substance CAS number	Limit/Requirement
Antimony (Sb), total amount 7440-36-0	10 ppm

<sup>&</sup>lt;sup>7</sup> For 100% polyester the total Sb limit applies, as H&M Chemical Restrictions for Textile products, Accessories, Footwear, Bags and Belts. The limit of Sb in the cosmetic product is proportionally lowered in relation to the polyester content, e.g. 50% polyester ingredient = Sb limit 130 ppm in the cosmetic product.

<sup>&</sup>lt;sup>8</sup> Guidance Limit.

<sup>&</sup>lt;sup>9</sup> Formaldehyde releasers are e.g. 2-Bromo-2-Nitropropane-1,3-Diol (52-51-7), Diazolidinyl Urea (78491-02-8), DMDM Hydantoin (6440-58-0), Imidazolidinyl Urea (39236-46-9).

# 7.3 Ingredients

#### 7.3.1 For All Countries

Restricted substance CAS number		Limit/Requirement
Acetylcysteine 616-91-1		Usage ban
Acetylsalicylic acid 50-78-2		Usage ban
Acetaldehyde 75-07-0		Usage ban
Acetonylacetone 110-13-4		Usage ban
Alkali sulphides and alkaline ear various	th sulphides	Usage ban
Allylanisole 140-67-0		Usage ban
Aloe Vera, non-Decolorized Whe Extract <sup>10</sup> various	ole Leaf	Usage ban
Alpha-hydroxy acids (AHAs) AHA	s including, but	not limited to:
Alpha-hydroxycaprylic acid	-	10%, with a pH ≥3.5.
Alpha-hydroxyethanoic acid +	-	
Ammonium alpha-hydroxyethan	oate	Preparations intended to be diluted in bath water may
Alpha-hydroxyoctanoic acid	-	contain levels of citric acid exceeding 10%.
Alpha hydroxy and botanical con	nplex -	
Citric acid	77-92-9,	
	5949-29-1	
Glycolic acid	79-14-1	
Glycolic acid +	79-14-1,	
Ammonium glycolate	35249-89-9	
Glycomer in cross-linked fatty	-	
acids alpha-nutrium		
Hydroxycaprylic acid	617-73-2	
Lactic acid	50-21-5	
L-alpha hydroxy acid	-	
Malic acid	97-67-6	
Mixed fruit acid	-	
Tri-alpha hydroxy fruit acids	-	
Triple fruit acid	-	
In all products (including skin pro SPF)	ducts without	≥3% specific label requirements <sup>11</sup>
Skin products without SPF		2.5% - 10% Interval with specific label requirements <sup>11</sup>

<sup>&</sup>lt;sup>10</sup> Aloe Vera, non-decolorized whole leaf extract consists of the liquid portion of the Aloe vera leaf and is a natural constituent of the Aloe Barbadensis Miller plant

<sup>&</sup>lt;sup>11</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information, see the H&M document "Labelling requirements for cosmetic products" – for H&M internal use only, not available for suppliers.

Restricted substance CAS number		Limit/Requirement
Aluminium chloride 7446-70-0		
	lorido hovohvdi	rate. Not permitted in combinations with aluminium
chlorohydrate or its associated co		
In deodorant and antiperspirant,	not in aerosol	Must be in the form of an aqueous solution.
dispensers		Specific label requirements <sup>12</sup>
In deodorant and antiperspirant, i dispensers	in aerosol	Usage ban
Aluminium chlorohydrate, and its	s associated co	mplexes Various, e.g.:
Including but not limited to:		
Aluminium chlorohydrate	12042-91-0	≤ 25% calculated as the anhydrous form. Not
Aluminium chlorohydrex PEG	242812-76-6	permitted in combination with aluminium chloride,
Aluminium chlorohydrex PG	245090-52-2	other aluminium chlorohydrate complexes or aluminium zirconium complexes.
Aluminium dichlorohydrate	10284-64-7	
Aluminium dichlorohydrex PEG	242812-79-9	-
Aluminium dichlorohydrex PG	245090-53-3	-
Aluminium sesquichlorohydrate	11089-92-2	
Aluminium seschlorohydrex PEG	242812-86-8	-
Aluminium sesquichlorohydrex PG	245090-60-2	
In deodorant and antiperspirant		Specific label requirements <sup>12</sup>
In aerosol dispenser		Specific label requirements <sup>12</sup>
Aminophylline 317-34-0		Usage ban
Ammonia 7664-41-7 / 1336-21-6		5%
Amylvinylcarbinyl acetate 2442-1	.0-6	0.3%
Arachis hyogaea (peanut) oil/extracts 8002-03-7		Usage ban
Areca catechu seed extract 89952	7-52-8	Usage ban
Azelaic acid 123-99-9		Usage ban
Benzophenone 119-61-9		Usage ban
Benzoyl peroxide 94-36-0		Usage ban
BHA 25013-16-5		4.0 mg/day <sup>13</sup>
Bimatoprost 155206-00-1		Usage ban
Bismuth citrate 813-93-4		Usage ban

<sup>&</sup>lt;sup>12</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information, see the H&M document

<sup>&</sup>quot;Labelling requirements for cosmetic products" - for H&M internal use only, not available for suppliers.

<sup>&</sup>lt;sup>13</sup> Exposure limit.

Restricted substance CAS number		Limit/Requirement
Bismuth subgallate 99-26-3		Usage ban
Bismuth subnitrate 1304-85-4		Usage ban
Bispyrithione 3696-28-4		Usage ban
Boric acid 11113-50-1		Usage ban
Bromate (BrO <sub>3</sub> -) Various		Usage ban
Caffeic acid 331-39-5		Usage ban
Calcium Hydroxide 1305-62-0		
Hair straightening products		7%
Other products		Usage ban
Camphor 76-22-2/ 464-49-3		3%
Chloramine T 127-65-1		Usage ban
Chloramine T trihydrate 7080-50-	-4	Usage ban
Chlorhexidine and its salts Variou	s, e.g.:	
Chlorhexidine	55-56-1	0.14%, calculated as chlorhexidine free base
Chlorhexidine diacetate	56-95-1	0.19%, calculated as chlorhexidine diacetate
Chlorhexidine digluconate	18472-51-0	0.20%, calculated as chlorhexidine digluconate
Chlorhexidine dihydrochloride	3697-42-5	0.16%, calculated as chlorhexidine dihydrochloride
Chloride salts of alkali metals 381 7775-09-9	.1-04-9,	3%
Chlorofluorocarbon propellants (halogenated alkanes) Various		Usage ban
Chlorohydroxy-aluminum allantoinate (Alcloxa)		1%
Cinnamyl anthranilate 87-29-6		Usage ban
Citrus reticulata leaf oil 8014-17-	3/8008-31-9	
In leave-on products		0.1%
Cloflucarban 369-77-7		Usage ban
Cocamide DEA 68603-42-9		Usage ban
Colophonium 8050-09-7		Usage ban
<b>Cyanoacrylate</b> <i>Various, e.g.:</i> Ethyl cyanoacrylate 7 Methyl cyanoacrylate 137-05-3		7085-85-0, Isopropyl cyanoacrylate 10586-17-1,
In adhesives for nail application		Specific label requirements <sup>14</sup>
In all other product types		Usage ban

<sup>&</sup>lt;sup>14</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information, see the H&M document "Labelling requirements for cosmetic products" – for H&M internal use only, not available for suppliers.

Limit/Requirement
Usage ban
0.1%
1%
0.1%
Usage ban
Usage ban
0.02%
0.02%
Usage ban
Usage ban
Usage ban
6%
•
0.1%
Usage ban
Usage ban
Usage ban
3%
Usage ban
Usage ban
ative
0.8%
Usage ban
25%
Usage ban

Restricted substance CAS number	Limit/Requirement	
Formaldehyde releasers <sup>15</sup> Various, i.e. some pres	anuativos	
•		
In leave-on products	Usage ban	
<b>Fragrance allergens</b> <i>Various, see EU Cosmetic Reg</i> As defined in EU Cosmetic Regulation <sup>16</sup>	guiation	
5	noo allargans shall taka into account all passible sources	
of the fragrance allergens, <i>i.e.</i> not only the perfur	nce allergens shall take into account all possible sources me and/or the aroma can contribute to the clude, but are not limited to, ingredients, herbal extracts	
In deodorants and antiperspirants aimed to be used under arms	0 fragrance allergens to be labelled on product.	
In child appealing and children cosmetic products	0 fragrance allergens to be labelled on product.	
2,4-Hexadienal 142-83-6	Usage ban	
2-Hexylidine cyclopentanone 17373-89-6	0.06%	
Hydrastis Canadensis extract/root extract/powder 84603-60-1	Usage ban	
Hydrolyzed carrageenan 53973-98-1	Usage ban	
p-Hydroxyanisol 150-76-5	Usage ban	
Iris florentina root 90045-89-9	Usage ban	
Laureth-8 9002-92-0 / 3055-98-9	2%	
Laureth-9 3055-99-0 / 9002-92-0 / 68439-50-9	2%	
Laureth-10 9002-92-0 / 6540-99-4 / 68002-97-1	2%	
Lithium carbonate 554-13-2	Usage ban	
Lithium hydroxide 1310-65-2		
Hair straightening products	4.5%	
Other products	Usage ban	
Melaleuca alternifolia leaf oil/extract/powder/water (tea tree) 85085-48-9		
In oral hygiene products	0.2%	
In child appealing and children cosmetic products	Usage ban	
In all types of products except oral hygiene products or child appealing and children cosmetic products	2%	

<sup>&</sup>lt;sup>15</sup> Formaldehyde releasers are e.g. 2-Bromo-2-Nitropropane-1,3-Diol (52-51-7), Diazolidinyl Urea (78491-02-8), DMDM Hydantoin (6440-58-0), Imidazolidinyl Urea (39236-46-9).

<sup>&</sup>lt;sup>16</sup> Regulation (EC) No 1223/2009 on cosmetic products.

Restricted substance CAS number	Limit/Requirement
Methacrylic acid 79-41-4	> 5% Limit with specific label requirements <sup>17</sup>
Methyl alcohol 67-56-1	Usage ban
6-Methylcoumarin 92-48-8	Usage ban
Methyl eugenol (1,2-Dimethoxy-4-(2- propenyl)-benzene) 93-15-2	Usage ban
Methylheptadienone 1604-28-0	0.002%
Methyl methacrylate 80-62-6	Usage ban
Methyl n-methyl anthranilate 85-91-6	0.1%
Constitutes the main part of Petitgrain Mandarin oil/Citrus reticulate leaf oil	
Methyl octyne carbonate 111-80-8	0.002% (when used in combination with methyl 2- octynonate, sum of concentration 0.01%)
Methyl 2-octynoate 111-12-6	0.01% (when used in combination with methyl-octyne carbonate, sum of concentration 0.01% (of which methyl octane carbonate should not be more than 0.002 %))
Methyl pyrrolidone 872-50-4	Usage ban
Methyl salicylate 119-36-8	1%
МІВК 108-10-1	Usage ban
Mixed cresols (and derivatives) 1319-77-3	Usage ban
Myrcene 123-35-3	Usage ban
Nanomaterials Various	Usage ban
Nanomaterials for which Article 16 of EU Cosmetic Regulation 1223/2009 apply <sup>18</sup>	
N-chloro-p-toluenesulfonamide 144-86-5	Usage ban
Nitromethane 75-52-5	Usage ban
4-Nitro-o-phenylenediamine 99-56-9	Usage ban
2-Nitro-p-phenylenediamine 5307-14-2	Usage ban
Nitrous oxide 10024-97-2	Usage ban
Nonylphenol ethoxylates (NPE) and its degradation products Various	Usage ban
Octylphenol ethoxylates (OPE) and its degradation products Various	Usage ban
Oxyquinoline 148-24-3	Usage ban

<sup>&</sup>lt;sup>17</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information, see the H&M document "Labelling requirements for cosmetic products" – for H&M internal use only, not available for suppliers.

<sup>&</sup>lt;sup>18</sup> Article 16 does not apply to nanomaterials used as colorants, UV-filters or preservatives regulated under article 14, unless expressly specified.

Restricted substance CAS number		Limit/Requirement
Per- and Polyfluoroalkyl Substand	ces (PFAS) Vario	us, e.g.:
Including but not limited to:		
Acrylates/methoxy PEG-23 methacrylate/perfluorooctyl ethyl acrylate copolymer	-	Usage ban
Acrylates/perfluorohexylethyl methacrylate copolymer	1557087-30-5	
Acrylates/trifluoropropylmethacr ylate/polytrimethyl siloxymethacrylate copolymer	-	
Ammonium C6-16 perfluoroalkylethyl phosphate	65530-70-3, 65530-72-5, 65530-71-4	
Ammonium C9-10 perfluoroalkylsulfonate	-	
Ammonium perfluorohexyl ethylphosphates	-	
Ammonium perfluorooctane sulfonate/ammonium heptadecafluorooctanesulfonate	29081-56-9	
Amp-C8-18 perfluoroalkylethyl phosphate	-	
Behenyl methacrylate/perfluorooctylethyl methacrylate copolymer	-	
Butyl acrylate/C6-14 perfluoroalkylethyl acrylate/mercaptopropyl dimethicone copolymer	-	
C20-28 alkyl perfluorodecylethoxy dimethicone	-	
C4-14 perfluoroalkylethoxy dimethicone	-	
C4-18 perfluoroalkylethyl thiohydroxypropyltrimonium chloride	70983-60-7	
C6-12 perfluoroalkylethanol	-	
C6-14 perfluoroalkylethyl acrylate/hema copolymer	-	
Dea-perfluorohexyl ethylphosphates	-	
Decafluoropentane	138495-42-8	

Restricted substance CAS number	-	Limit/Requirement
Diethanolamine perfluorooctane sulfonate	70225-14-8	Usage ban
Diethylaminoethyl methacrylate/hema/perfluorohex ylethyl methacrylate crosspolymer	-	
Dioctyldodecyl fluoroheptyl citrate	-	
Ethyl perfluorobutyl ether	163702-05-4	
Ethyl perfluoroisobutyl ether	163702-06-5	
Hexafluoropropylene/tetrafluoro ethylene copolymer	-	
Hydrofluorocarbon 134A	811-97-2	
Hydrofluorocarbon 227EA	431-89-0	
Isododecyl/perfluorononylethyl dimer dilinoleate/citrate	-	
Isopropyl titanium triisostearate/perfluorooctyl triethoxysilane crosspolymer	-	
Lithium perfluorooctane sulfonate / lithium heptadecafluorooctanesulfonate	29457-72-5	
Methyl perfluorobutyl ether	163702-07-6	
Methyl perfluoroisobutyl ether	163702-08-7	
PEG-10 acrylate/perfluorohexylethyl acrylate copolymer	-	
PEG-10 nonafluorohexyl dimethicone copolymer	-	
PEG-12 dimethicone/bis-isobutyl PPG-20 crosspolymer	-	
Perfluoro dimethylethylpentane	502858-18-2	
Perfluoro t-butylcyclohexane	84808-64-0	
Perfluoroalkylsilyl mica	-	
Perfluorobutylcyclohexane	374-60-7	
Perfluorocaprylyl bromide	423-55-2	
Perfluorocaprylyl triethoxysilylethyl methicone	-	
Perfluorocyclohexylmethanol	28788-68-3	
Perfluorodecalin	306-94-5	
Perfluorodimethylcyclohexane	335-27-3	

Restricted substance CAS number		Limit/Requirement
Perfluoroheptane	335-57-9	Usage ban
Perfluorohexane	355-42-0	a
Perfluorohexyl ethylphosphonic acid	252237-40-4	
Perfluorohexylethyl dimethylbutyl ether	210896-25-6	
Perfluoroisohexane	355-04-4	n
Perfluoromethylcyclohexane	355-02-2	
Perfluoromethylcyclopentane	1805-22-7	-
Perfluoromethyldecalin	51294-16-7	-
Perfluorononyl dimethicone	-	-
Perfluorononyl dimethicone/ methicone/amodimethicone crosspolymer	-	
Perfluorononyl octyldodecyl glycol grapeseedate	-	-
Perfluorononyl octyldodecyl glycol meadowfoamate	-	-
Perfluorononylethyl carboxy PEG- 7 dimethicone phosphate	-	-
Perfluorononylethyl carboxydecyl behenyl dimethicone	-	-
Perfluorononylethyl carboxydecyl hexacosyl dimethicone	-	- -
Perfluorononylethyl carboxydecyl lauryl dimethicone	-	-
Perfluorononylethyl carboxydecyl lauryl/behenyl dimethicone	-	
Perfluorononylethyl carboxydecyl PEG-10 dimethicone	-	
Perfluorononylethyl carboxydecyl PEG-8 dimethicone	-	
Perfluorononylethyl dimethicone/methicone copolymer	-	
Perfluorononylethyl PEG-8 dimethicone	-	
Perfluorononylethyl PEG-8 phenylisopropyl dimethcone	-	
Perfluorononylethyl stearyl dimethicone	-	

Restricted substance CAS number	r
Perfluorooctanesulfonic acid / heptadecafluorooctanesulfonic acid	1763-23-1
Perfluorooctyl triethoxysilane	51851-37-7
Perfluorooctylethyl triethoxysilane	101947-16-4
Perfluorooctylethyl trimethoxysilane	83048-65-1
Perfluorooctylethyl trisiloxane	163921-85-5
Perfluorooctylethyl/diphenyl dimethicone copolymer	-
Perfluoroperhydrobenzyl tetralin	116265-66-8
Perfluoroperhydrofluorene	307-08-4
Perfluoroperhydrophenanthrene	306-91-2
Perfluorotetralin	2342-07-06
Polyacrylate-37	-
Polyperfluoroethoxymethoxy difluoroethyl PEG diisostearate	-
Polyperfluoroethoxymethoxy difluoroethyl PEG ether	162492-15-1, 88645-29-8
Polyperfluoroethoxymethoxy difluoroethyl PEG ether diisostearate	-
Polyperfluoroethoxymethoxy difluoroethyl PEG phosphate	-
Polyperfluoroethoxymethoxy difluorohydroxyethyl ether	-
Polyperfluoroethoxymethoxy difluoromethyl distearamide/ tribehenin PEG-20 esters	220207-10-3
Polyperfluoroethoxymethoxy difluoromethyl ether	161075-02-1
Polyperfluoroethoxymethoxy peg-2 phosphate	162567-74-0
Polyperfluoroisopropyl ether	-
Polyperfluoromethylisopropyl ether	69991-67-9
Polyperfluoroperhydrophenanthre	ne <i>159182-00-0</i>
Polytetrafluoroethylene acetoxypropyl betaine	123171-68-6
Polysilicone-7	146632-08-8

Restricted substance CAS numbe	r	Limit/Requirement
Polysilicone-10	-	Usage ban
Polyurethane-26	328389-90-8	A
Polyurethane-27	328389-91-9	-
Polyacrylate-37	-	
Potassium perfluorohexyl ethylphosphate	1224952-82-2	
Potassium perfluorooctanesulfonate / potassium heptadecafluorooctane-1- sulfonate	2795-39-3	
PTFE	9002-84-0	
Sodium perfluorohexyl ethylphosphonate	1189052-95-6	
Stearyl methacrylate/perfluorooctylethyl methacrylate copolymer	-	
TEA-C8-18 perfluoroalkylethyl phosphate	-	- -
TEA-perfluorohexyl ethylphosphate	es -	
Tetrafluoropropene	29118-24-9	A
Trifluoromethyl C1-4 alkyl dimethio	cone -	- -
Perillaldehyde 2111-75-3		0.1%
Phenacetin 62-44-2		Usage ban
Pheromones Various		Usage ban
Phthalates except diethyl phthal	ate (DEP, CAS nu	umber 84-66-2) Various, e.g.:
Phthalates including, but not limi	ted to:	
Di-isononyl phthalate (DINP)	28553-12-0	Usage ban
Diethylhexyl phthalate (DEHP)	117-81-7	
Di-n-octyl phthalate (DNOP)	117-84-0	
Di-iso-decyl phthalate (DIDP)	26761-40-0	
Butyl benzyl phthalate (BBP)	85-68-7	
Dibutyl phthalate (DBP)	84-74-2	
<b>Piper methysticum extract (kawa</b> 9000-38-8 / 84696-40-2	a kawa)	Usage ban
Plastic microbeads <sup>19</sup>		
In rinse off products, scrub- and p	eel products	Usage ban

<sup>19</sup> Any solid plastic particle that is less than five millimeters in size

Restricted substance CAS number		Limit/Requirement
Propylene glycol t-butyl ether 57018-52-7		Usage ban
Prostaglandins and its synthetic derivatives incl.		salts and esters
Including but not limited to:		
Cyclopropylbimatoprost	1138395-12-6	Usage ban
Cyclopropylmethylbimatoprost	1138395-10-4	
Dechloro cyclopropylcloprostenolamide	1138395-11-5	
Dechloro cyclopropylmethylcloprostenola mide	1138395-09-1	
Dechloro dihydroxy difluoro ethylcloprostenolamide	-	
Dechloro ethylcloprostenolamide	1005193-64-5	
Dehydrolatanoprost	130209-76-6	
Dihydroxypropyl dehydrolatanoprostamide	-	
Dihydroxypropyl didehydrolatanoprostamide	-	
Ethyl travoprostamide	1005193-64-5	
Isobutyl trifluoromethyl dechloro ethylcloprostenate	-	
Isopropyl cloprostenate	157283-66-4	
Nortafluprost	209860-89-9	
Trifluoromethyl dechloro ethylcloprostenolamide	1005193-64-5	
Trifluoromethyl dehydrolatanoprost	-	
Pueraria mirifica		Usage ban
Resmethrin 10453-86-8		Usage ban
Retinol (vitamin A) 68-26-8 / 112	103-57-4	1% retinol equivalents <sup>20</sup>
and its esters:		
Retinyl acetate	127-47-9	
Retinyl palmitate	79-81-2	
Rose ketone-3 57378-68-4		0.02%
Rose ketone-4 23696-85-7		0.02%

<sup>20</sup> Note the conversion factor between retinol and other retinol equivalents, e.g. 1.0% w/w retinol is equivalent to 1.15% w/w retinol acetate and to 1.83% w/w retinyl palmitate.

Restricted substance CAS number		Limit/Requirement
Salicylic acid 69-72-7		
When used for other purposes than as a preserv		
Products intended for children	•	Usage ban
Body lotion, eye shadow, masc	•	Usage ban
lipstick, roll-on deodorant, oral applications that may lead to e	•	
of the end-user's lungs by inhal	•	
Other products		0.5%
Silver and its salts 7440-22-4 /	various	
In all products		Specific label requirements <sup>21</sup>
In mouthwash		0.04%
Sodium bromate 7789-38-0		< 600 mg <sup>22</sup>
Sodium o-phenylphenate 132-	27-4	Usage ban
Sodium picramate 831-52-7		0.1%
Strontium compounds Various	, e.g.:	
Including but not limited to:		
Strontium Acetate and its	543-94-2	Usage ban
hemihydrate Strontium Chloride and its	10476-85-4	
hexahydrate	10 // 0 00 /	
Strontium Citrate	813-97-8	
Strontium Hydroxide	10840-07-4,	
	1311-10-0	
Strontium Peroxide	1314-18-7	
Strontium Sulfide	1314-96-1	
Strontium Thioglycolate	38337-95-0	
Styrene 100-42-5		Usage ban
Sulindac 38194-50-2		Usage ban
Symphytum spp. (comfrey) except symphytum officinale		Usage ban
Talc 14807-96-6		
In loose powder products for body and hair application		Usage ban
In loose powder products for fa	ace application	Usage ban
In child appealing and children cosmetic products		Usage ban

<sup>21</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information see the H&M document

"Labelling requirements for cosmetic products"- for H&M internal use only, not available for suppliers.

<sup>22</sup> Total amount (in weight, as the sum of all formulations) per each individual product.

Restricted substance CAS number	Limit/Requirement
<b>TBHQ</b> <i>1948-33-0</i>	0.1%
Theophylline 58-55-9	Usage ban
Thioacids and their derivatives various	
Products for use around the eye area	Usage ban
In all other types of products	Specific label requirements <sup>21</sup>
Thioglycolic acid and its salts 68-11-1	
Products intended for eyelash waving	Usage ban
Thioglycolic acid, including its salts and esters 68	3-11-1
Rinse-off hair products	2%
Thiolactic acid and its salt 79-42-5	
Hair waving or straightening products	8.5% ready for use at pH<9.5, Specific label requirements <sup>23</sup>
Depilatories	5% ready for use at pH 7-12.7, Specific label requirements <sup>23</sup>
Rinse off hair care products	2% ready for use at pH 7-9.5, Specific label requirements <sup>23</sup>
In all other types of products	Usage ban
Thorium dioxide 1314-20-1	Usage ban
Tocopherol 1406-18-4	20%
Tolnaftate 2398-96-1	Usage ban
Toluene 108-88-3	Usage ban
Topiramate -	Usage ban
Tranexamic acid 1197-18-8	
Products for skin application	3%
Products intended to be placed in contact with the mucous membrane	Usage ban
Trans-rose ketone-1 24720-09-0	0.02%
Trans-rose ketone-2 23726-91-2	0.02%
Trans-rose ketone-3 71048-82-3	0.02%
Trans-2-Hexenal 6728-26-3	0.002%
Triclosan 3380-34-5	Usage ban
Tris(n-hydroxyethyl) hexahydrotriazine 4719-04-4	Usage ban
Tyrothricine 1404-88-2	Usage ban

<sup>23</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information see the H&M document "Labelling requirements for cosmetic products"- for H&M internal use only, not available for suppliers.

Restricted substance CAS number	Limit/Requirement	
<b>Urea</b> 57-13-6	10%	
Usnic Acid 125-46-2	Usage ban	
Zinc phenolsulfonate 127-82-2		
Leave-on products	2%	
Zinc pyrithione 13463-41-7		
When used for other purposes than as a preservative		
Rinse-off products with purpose to reduce	1%	
dandruff		
Other products	Usage ban	
Zirconium containing complexes Various		
In aerosol package	Usage ban	

# 7.3.2 Additional Restrictions for Products to Malaysia

Restricted substance CAS number	Limit/Requirement
Anthranilic acid 2719-08-6	Usage ban
Alkaloids of:	
Piper methysticum 84696-40-2	Usage ban
Pomegranate Various	
Quebracho -	
Barium sulfide 21109-95-5	Usage ban
Bifonazole 60628-96-8	Usage ban
Butyrolactone 96-48-0	Usage ban
Clotrimazole 23593-75-1	Usage ban
Cucurbitacin B 6199-67-3	Usage ban
Cysteamine HCL 156-57-0	Usage ban
Disodium succinoyl glycyrrhetinate 7421-40-1	Usage ban
Dyphylline 479-18-5	Usage ban
Disodium etidronate 7414-83-7	Usage ban
Ethyl ether 60-29-7	Usage ban
Heliotropine 120-57-0	
All products except perfumes and when added	Usage ban
as a flavouring agent	
Heparin 9005-49-6	Usage ban
Hydrobromic acid 10035-10-6	Usage ban
Ibuprofen 15687-27-1	Usage ban
Itraconazole 84625-61-6	Usage ban
Methylglucamine 6284-40-8	Usage ban
Melatonin 73-31-4	Usage ban
Miconazole nitrate 22832-87-7	Usage ban
Naproxen 22204-53-1	Usage ban
Natamycin 7681-93-8	Usage ban
Phenylacetic acid 103-82-2	Usage ban
Piracetam 7491-74-9	Usage ban
Pyricarbate 1882-26-4	Usage ban
Quinine 130-95-0	Usage ban (unless when used as denaturant)
Ursodiol 128-13-2	Usage ban
Valepotriates in valeriana extracts Various	Usage ban

# 7.3.3 Additional Restrictions for Products to South Korea

Restricted substance CAS number	Limit/Requirement
Acetone 67-64-1	Nail polish remover with a content of acetone shall have a child proof container <sup>24</sup>
CI 40800 (Orange) -	Usage ban
CI 14700 (Red)	Lakes of Strontium, Barium or Zirconium are
CI 15800 (Red)	prohibited.
Cl 17200 (Red)	
Cl 42090 (Blue)	
CI 45350 (Yellow)	
CI 47000 (Yellow)	
Cl 59040 (Green)	
CI 60725 (Violet)	
Cl 61565 (Green)	
Cl 61570 (Green)	
Cl 73360 (Green)	
Henna Leaf powder (Lawsonia Inermis) 84988-66-9	Usage ban
Hydrocarbons with a viscosity ≤ 21 cSt (at 40°C) Various	Non-emulsion product with more than 10% hydrocarbons shall have a child proof container <sup>24</sup>
Hydrogen peroxide 7722-84-1	
Nail hardener products	2%
Other products	Usage ban
Resorcinol 108-46-3	0.1%

<sup>&</sup>lt;sup>24</sup> Such container shall not be difficult to open for an adult, but difficult to open for a child of 5 years' age or younger. ISO standard 8317 applies for child proof container.

# 7.3.4 Additional Restrictions for Products to USA<sup>25</sup>

Restricted substance CAS number	Limit/Requirement
Dihydroxyacetone 96-26-4	
Tanning Products	Specific label requirements <sup>26</sup>
Products applied to the area of eyes, lips or mucous membrane	Usage ban
Substances used as active ingredients in self- tanning products various	Must be approved by FDA for use as a colour additive in cosmetic products. <sup>27</sup>

#### 7.3.5 Additional Restrictions for Children Cosmetic Products to USA

Restricted substance CAS number	Limit/Requirement
Benzophenone-2 131-55-5	Usage ban
BHA 25013-16-5	Usage ban
Butylparaben 94-26-8	Usage ban
Diethyl phthalate 84-66-2	Usage ban
Ethylparaben 120-47-8	Usage ban
Glycol 107-21-1	Usage ban
4-Hydroxybenzoic acid 99-96-7	Usage ban
МЕК 78-93-3	Usage ban
Methylparaben 99-76-3	Usage ban
Phthalic anhydride 85-44-9	Usage ban
Propyl paraben 94-13-3	Usage ban
Triphenyl phosphate 115-86-6	Usage ban

<sup>&</sup>lt;sup>25</sup> The requirements stated in this chapter is also valid for Puerto Rico.

<sup>&</sup>lt;sup>26</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information, see the H&M document "Labelling requirements for cosmetic products" – for H&M internal use only, not available for suppliers.

<sup>&</sup>lt;sup>27</sup> Title 21 of the Code of Federal Regulations.

# 8. Limitations of Volatile Organic Compounds (VOCs) for Cosmetic Products in the USA<sup>28</sup>, Canada and Hong Kong

Volatile organic compounds (VOCs) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. A number of chemicals are excluded from this VOCs definition, please refer *Table 3. Exempted Volatile Organic Compounds*.

VOCs regulated cosmetic products together with limits are listed in Table 1.

Each product, for USA, subjected to Table 1. requires specific label requirements.<sup>29</sup>

*Table 2.* defines the VOCs and also provides a list of examples of VOCs for usage in cosmetic products. VOCs which are not covered by *Table 2.*, are not considered as VOCs for the purpose of this chapter.

#### **IMPORTANT NOTICE!**

The list of examples of VOCs in *Table 2*. and the list of exempted VOCs in *Table 3*. is not a list of allowed ingredients. The formula must always comply with the H&M Chemical Restriction and must pass the cosmetic product safety report.

<sup>&</sup>lt;sup>28</sup> The requirements regarding VOCs for cosmetic products stated in this chapter is also valid for Puerto Rico.

<sup>&</sup>lt;sup>29</sup> Specific label requirements are additional to the EU Cosmetic Regulation. For detailed information see the H&M document "Labelling requirements for cosmetic products"- for H&M internal use only, not available for suppliers.

# Table 1. VOC Products and VOC Limitations in the USA, Canada and Hong Kong

Product Type <sup>30</sup>	VOC Limitations (weight %)		
	USA	Canada	Hong Kong
Any of the product type listed	The perfume ingredients concentration C% will contribute to the		ntribute to the
below with perfume ingredients	calculated VOC concentration by (C-2) %		
> 2%, except for personal			
fragrance product			
Astringent/Toner	35	Not restricted	Not restricted
Deodorant	1) Alcohol (CAS 64-17-5) is not	Not restricted	Not restricted
	defined as MVOC in deodorant.		
	2) The combined perfume		
	ingredients and colorants		
	concentration C% will		
	contribute to the calculated		
	VOC concentration by (C-2) %.		
Deodorant Non-Aerosol	0 HVOC <sup>31</sup>		
	0 MVOC <sup>32</sup>		
	Other VOCs not restricted		
Deodorant Aerosol	0 HVOC <sup>31</sup>	20 HVOC <sup>31</sup>	Not restricted
	10 MVOC <sup>32</sup>	MVOC <sup>32</sup>	
		not restricted	
	Other VOCs not restricted	Other VOCs	
		not restricted	
Hairspray	55	80	55
Hair Shine	55	Not restricted	Not restricted
Hair Mousse	6	16	Not restricted
Hair Styling Product			
Gel	2	6	Not restricted
Aerosol	6	Not restricted	
Pump spray	6		
All other forms	2		
Nail Polish Remover	1	85	Not restricted
Personal Fragrance Product			
	defined as VOC in personal fragran	· · · ·	
Product with ≤ 20% fragrance	75	Not restricted	Not restricted
Product with > 20% fragrance	65		
Shaving Cream	5	5	Not restricted
Shaving Gel	4	Not restricted	Not restricted
Temporary Hair Colour Aerosol	55	Not restricted	Not restricted

<sup>&</sup>lt;sup>30</sup> For definition of different product type see *Table 4*.

<sup>&</sup>lt;sup>31</sup> HVOC is any organic compound that exerts a vapor pressure greater than 80 mm Hg at 20°C.

<sup>&</sup>lt;sup>32</sup> MVOC is any organic compound that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20°C.

# Table 2. Volatile Organic Compounds (VOCs)

Volatile Organic Compound	CAS number	
Volatile organic compound for usage in cosmetic products		
For the purpose of this Table 2.:		
• Compound = a molecule of definite chemical formula and isometric structure;		
<ul> <li>Mixture = a substance comprised of two or i</li> </ul>	more compounds.	
Compound or mixture that contains at least one car	bon atom, which is <b>NOT</b> listed in the <i>Table 3.,</i> and	
meets one or more of the following:		
<ul> <li>has a vapor pressure more than 0.1mm Hg a</li> </ul>	•	
•	oms, or a chemical mixture comprised solely of	
•	fied by formulation data, and the vapor pressure	
<ul><li>and boiling point are unknown;</li><li>is a chemical compound with a boiling point</li></ul>	lower than 216 °C.	
<ul> <li>is a chemical compound with a boiling point</li> <li>is a weight percent of a chemical mixture th</li> </ul>		
• Is a weight percent of a chemical mixture th	at boils below 210°C.	
Examples of volatile organic compound for usage in	n cosmetic products	
Perfume ingredient	-	
Plant/fruit derivatives	various	
See the VOC definition in Table 2.		
Acetic acid	64-19-7	
Acetophenone	98-86-2	
Acetum	90132-02-8	
Alcohol	64-17-5	
Alcohol is not defined as MVOC for deodorant.		
Alpha-terpinene	99-86-5	
Amyl acetate	628-63-7	
Amyl alcohol	71-41-0	
Amyl propionate	624-54-4	
Benzaldehyde	100-52-7	
Benzoyl isopropanol	7473-98-5	
Benzyl acetate	140-11-4 / 101-41-7	
Beta-pinenes	127-91-3	
Butane	106-97-8	
Butoxyethanol	111-76-2	
Butoxyethyl acetate	112-07-2	
Butoxypropanols (mixture of isomers), e.g.,	various, e.g. 23436-19-3	
isobutoxypropanol		
Butyl acetate	123-86-4	
Butyl acrylate	141-32-2	
Butyl alcohol	71-36-3 / 78-92-2 / 75-65-0	
tyl methacrylate 97-88-1		

Volatile Organic Compound	CAS number
Butyl propionate	590-01-2
Butyrolactone	96-48-0
C10-13 alkane	129813-66-7
C10-13 isoparaffin	68551-17-7
C11-12 isoparaffin	246538-76-1
C11-13 isoparaffin	246538-78-3
C11-15-isoalkanes	90622-58-5
C12-14 isoparaffin	68551-19-9
C7-8 isoparaffin	70024-92-9
C8-9 isoparaffin	246538-71-6
C9-11 isoparaffin	68551-16-6
Camphor	464-49-3 / 76-22-2
Caprylic alcohol	111-87-5
Chlorobutanol	57-15-8
Citronellal	106-23-0
Cyclohexane	110-82-7
Cyclohexanol	108-93-0
Cyclohexanone	108-94-1
Cyclohexyl methacrylate	101-43-9
p-Cymene	99-87-6
Decane	124-18-5
Deodorized kerosene	8008-20-6
Diacetone alcohol	123-42-2
Diacetyl	431-03-8
Diethoxydiglycol	112-36-7
Diethylbenzene	25340-17-4
Diethylenetriamine	111-40-0
Dihydroxyacetone	96-26-4
Dimethyl ether	115-10-6
Dimethyl mea	108-01-0
Dimethyl succinate	106-65-0
Dimethylphenyl carbinol	617-94-7
2,6-Dimethyl-4-heptanone	108-83-8
Dodecane	112-40-3
Dodecene	112-41-4
Ethanolamine	141-43-5
Ethoxydiglycol	111-90-0
Ethyl 2-methylbutyrate	7452-79-1
Ethyl 2-methylvalerate	39255-32-8

Volatile Organic Compound	CAS number	
Ethyl acetate	141-78-6	
Ethyl acetoacetate	141-97-9	
Ethyl butyrate	105-54-4	
Ethyl ether	60-29-7	
Ethyl formate	109-94-4	
Ethyl isobutyrate	97-62-1	
Ethyl lactate	97-64-3	
Ethyl methacrylate	97-63-2	
Ethyl propionate	105-37-3	
2-Ethylhexanol	104-76-7	
Ethylhexyl acetate	103-09-3	
Formic acid	64-18-6	
Gamma-terpinene	99-85-4	
Glutaral	111-30-8	
Glyoxal	107-22-2	
Hema	868-77-9	
Heptane	142-82-5	
Hexanal	66-25-1	
1,6-Hexanediamine	124-09-4	
Hexene (mixed isomers), e.g., 1-hexene	various , e.g., 592-41-6	
3-Hexenol	928-96-1	
3-Hexenyl acetate	1708-82-3	
Hexyl acetate	142-92-7	
Hexyl alcohol	111-27-3	
Isoamyl acetate	123-92-2	
Isoamyl butyrate	51115-64-1	
Isobutane	75-28-5	
Isobutyl acetate	110-19-0	
Isobutyl isobutyrate	97-85-8	
Isobutyl methacrylate	97-86-9	
Isododecane	31807-55-3 / 93685-81-5 / 13475-82-6	
Isononyl alcohol	27458-94-2	
Isooctane	540-84-1	
Isopentane	78-78-4	
Isopentyldiol	50468-22-9 / 2568-33-4	
Isopropanolamine	78-96-6	
Isopropyl acetate	108-21-4	
Isopropyl alcohol	67-63-0	
L-beta-pinene	18172-67-3	
Limonene	138-86-3 / 5989-27-5	
M-aminophenol	591-27-5	
MEK	78-93-3	

Volatile Organic Compound	CAS number				
Menthol	1490-04-6 / 2216-51-5 / 89-78-1 / 15356-70-4				
Mesitylene	108-67-8				
Methacrylic acid	79-41-4				
p-Menthadiene	555-10-2				
Methoxyisopropanol	107-98-2				
Methoxyisopropyl acetate	108-65-6				
Methoxymethylbutanol	56539-66-3				
4-Methylpentan-2-ol	108-11-2				
2-Methylpropanol	78-83-1				
Methyl amyl ketone	110-43-0				
Methyl isopropyl ketone	563-80-4				
Methyl lactate	27871-49-4 / 547-64-8				
Methyl methacrylate	80-62-6				
Methyl nonyl ketone	112-12-9				
Methylene glycol	463-57-0				
Methylethanolamine	109-83-1				
Methylheptanone	541-85-5				
Methyltrimethoxysilane	1185-55-3				
Mineral spirits	8032-32-4				
Myrcene	123-35-3				
Nonanal	124-19-6				
Nonane	111-84-2				
Octane	111-65-9				
Pentane	109-66-0				
Pentanol (mixed isomers)	various				
2-Pentanol	6032-29-7				
Pentanone	107-87-9				
Phenylpropane	103-65-1				
Pinene	80-56-8				
PPG-2 Methyl ether (isomers and mixture of	various, e.g. 13429-07-7 / 34590-94-8				
isomers)					
Propane	74-98-6				
Propionic acid	79-09-4				
Propyl acetate	109-60-4				
Propyl alcohol	71-23-8				
Propylene glycol butyl ether	5131-66-8				
Propylene glycol propyl ether	1569-01-3 / 30136-13-1				
Terpene hydrocarbons	68956-56-9				
Terpineol	8000-41-7				
Terpinolene	586-62-9				
Tetrahydrofurfuryl methacrylate	2455-24-5				
Trans-2-hexenal	6728-26-3				

Volatile Organic Compound	CAS number		
Triethylamine	121-44-8		
Trifluoroethyl methacrylate	352-87-4		
Trimethylbenzene	95-63-6		
Trimethylbicycloheptane	473-55-2 / 6876-13-7		
Tromethamine	77-86-1		
Turpentine	8006-64-2 / 9005-90-7 / 8052-14-0		
Undecane	1120-21-4		
Vinegar	8028-52-2		
Vinylstyrene	1321-74-0		
Xylene	95-47-6 / 108-38-3 / 1330-20-7		

## **Table 3. Exempted Volatile Organic Compounds**

Volatile Organic Compound	CAS number
Acetone	67-64-1
Aminomethyl propanol	124-68-5
Ammonium carbonate	10361-29-2
Carbon dioxide	124-38-9
Chlorotrifluoropropene	102687-65-0
Cyclic, branched, or linear completely methylated siloxanes	-
Cyclic, branched, or linear, completely fluorinated alkanes	-
Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations	-
Cyclic, branched, or linear, completely fluorinated tertiary amines with no	-
unsaturations	
Dimethyl carbonate	616-38-6
Ethane	74-84-0
Hydrofluorocarbon 152A	75-37-6
Metallic carbides	Various
Metallic carbonates	Various
Methyl acetate	79-20-9
Pentafluoropropane	460-73-1
Propylene carbonate	108-32-7
Sulfur containing perfluorocarbons with no unsaturations and with the sulfur	-
bonds to carbon and fluorine	
T-butyl acetate	540-88-5
2,5,5-Trimethyl-2-phenyl-1,3-dioxane	406-58-6

Product Type	Definition
Astringent/ Toner	Astringent/Toner means any product designed or labeled to be applied to the skin for the purpose of cleaning or tightening pores. This category also includes clarifiers and substrate-impregnated products. This category does not include any hand, face, or body cleaner or soap product, "Medicated Astringent/Medicated Toner," cold cream, lotion, antiperspirant, or any Astringent/Toner product regulated as a drug by the United States Food and Drug Administration (FDA).
Deodorant	Deodorant means any product including, but not limited to, aerosol, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent and/or minimize odour.
Hairspray	Hairspray means a consumer product that is applied to styled hair, and is designed or labelled to provide sufficient rigidity, to hold, retain and/or (finish) the style of the hair for a period of time.
Hair Shine	Hair Shine means any product designed for the primary purpose of creating a shine when applied to the hair. "Hair Shine" includes, but is not limited to, dual-use products designed primarily to impart sheen to the hair. "Hair Shine" does not include "Hair Finishing Spray," "Hair Mousse," "Hair Styling Product," or products whose primary purpose is to condition or hold the hair.
Hair Mousse	Hair Mousse means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.
Hair Styling Product	<ul> <li>Hair Styling Product means a consumer product that is designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling and/or sculpting of the hair.</li> <li>"Hair Styling Product" includes, but is not limited to hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hair style, and leave-in volumizers, detanglers and/or conditioners that make styling claims. "Hair Styling Product" does not include "No Rinse Shampoo," "Thermal Protectant," "Hair Mousse," "Hair Shine," "Hair Finishing Spray," or shampoos or conditioners that are rinsed from the hair prior to styling.</li> </ul>
	"Finish" or "finishing" means the maintaining and/or holding of previously styled hair for a period of time. "Styling" means the forming, sculpting, or manipulating the hair to temporarily alter the hair's' shape.
Nail Polish Remover	Nail Polish Remover means a product designed to remove nail polish and coatings from fingernails or toenails.

# Table 4. Definition of Product Type – only for the purpose of Chapter 8

Product Type	Definition
Personal Fragrance Product	Personal Fragrance Product means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including, but not limited to, EdT, body mist, perfume, body splash, body spray, cologne, aftershave, toilet water, lotion, and powder. Personal Fragrance Product does not include: (A) deodorant; (B) medicated products
	designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body; (C) mouthwashes, breath fresheners and deodorizers; (D) lotions, moisturizers, powders or other skin care products designed or labeled to be used primarily to alleviate skin conditions such as dryness and irritations; (E) products designed exclusively to be applied to human genitalia areas, undergarments, and any paper products, napkins or other products that are affixed to undergarments, such as sanitary pads; (F) soaps, shampoos, and products primarily used to clean the human body; and (G) fragrance products designed to be used exclusively on nonhuman animals.
Shaving	Shaving Cream means an aerosol product which dispenses a foam lather intended to
Cream	be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair. "Shaving Cream" does not include "Shaving Gel."
Shaving Gel	Shaving Gel means an aerosol product which dispenses a post-foaming semi-solid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other bodily hair. "Shaving Gel" does not include "Shaving Cream."
Temporary Hair Colour Aerosol	"Temporary Hair Colour" means any product that applies color, glitter, or UV-active pigments to hair, wigs, or fur and is removable when washed. "Temporary Hair Color" includes hair color mousses and products labeled to add texture or thickness to cover thinning/balding areas. "Temporary Hair Color" does not include "Hair Finishing Spray," "Hair Styling Product," or "Hair Mousse."

#### 9. Permitted Colorants in Cosmetic Products

All substances listed below are permitted as colorants in Cosmetic products under the specific restrictions and requirements laid down.

The numbers under the column "Field of application" mean:

- 1. Colouring agents permitted in all cosmetic products.
- 2. Colouring agents permitted in all cosmetic products, except those intended for use in the area of eye (eye lid, eye lashes and area below the eye down to the cheek bone).
- 3. Colouring agents permitted only in externally applied cosmetic products. They should not intend to come into contact neither with the mucous membrane (includes the intimate/genital area and the oral cavity of the mouth) nor with the lips.
- 4. Colouring agents permitted only in externally applied cosmetic products, except those intended for use in the area of eye. They should not intend to come into contact neither with the mucous membrane nor with the lips.

Permitted Colorants <sup>33</sup>	Colour	Field of Application <sup>34</sup>		ion <sup>34</sup>	Other Requirements <sup>35</sup>		
		1	2	3	4		
CI 10316 <sup>36</sup>	Yellow				Х	See also 21 CFR 74.2707a. All lakes are permitted as the ordinary colour, see 21 CFR 82.2051.	
						Usage ban of Zirconium containing complexes in aerosol package.	
CI 12085 <sup>36</sup>	Red				X Maximum level in the finished cosmetic product should not exceed 3.0%.		
					Also permitted in lip products at a maximum level of 3.0% in the finished product.		
					See also 21 CFR 74.2336. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051.		
						Usage ban of Zirconium containing complexes in aerosol package	
CI 14700	Red				Х		
						For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.	
CI 15510 <sup>36</sup>	Orange				х	See also 21 CFR 74.2254. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051.	
						Usage ban of Zirconium containing complexes in aerosol package.	

<sup>33</sup> Permitted colorants are named by their CI no. or other commonly used denomination. The lakes and salts of the permitted colorants, using substances not prohibited in Annex II or not regulated in Annex III of EU Cosmetic Regulation, are also permitted except if otherwise specified under the headline "Other requirements".

<sup>&</sup>lt;sup>34</sup> If there is no cross in the columns below the headline "Field of application" appropriate restrictions and conditions of use will be found under the headline "Other requirements".

<sup>&</sup>lt;sup>35</sup> Colorants whose number is preceded by the letter "E" in accordance with the EU Directive of 1962 concerning foodstuffs and coloring matters must fulfil the purity requirements laid down in those Directives. They continue to be subject to the general criteria set out in Annex III to the 1962 Directive concerning coloring matters where the letter "E" has been deleted there from. See also EU Cosmetic Regulation Annex IV for more information about the limitations and purity requirements in Europe for each colorant specified above.

<sup>&</sup>lt;sup>36</sup> The insoluble Barium, Strontium and Zirconium lakes, salts and pigments of these colorants shall also be permitted. They must pass test for insolubility, which will be determined by the procedure laid down in Article 8 in the EU Cosmetic Regulation.

Permitted Colorants <sup>33</sup>	Colour Field of Application <sup>34</sup>		on <sup>34</sup>	Other Requirements <sup>35</sup>				
colorants		1	2	3	4			
CI 15800	Red				x	See also 21 CFR 74.2331. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.		
CI 15850 <sup>36,37</sup>	Red		Х			See also 21 CFR 74.2306. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. Usage ban of Zirconium containing complexes in aerosol package.		
	Red		Х			See also 21 CFR 74.2307. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. Usage ban of Zirconium containing complexes in aerosol package.		
CI 15880	Red				х	See also 21 CFR 74.2334. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051.		
CI 15985 <sup>36</sup>	Yellow		Х			E 110. See also 21 CFR 74.2706. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051 and 21 CFR 82.51. Usage ban of Zirconium containing complexes in aerosol package.		
CI 16035	Red	x				Shall not be exposed to oxidizing or reducing agents or any other condition that may affect their integrity. The aluminium lake of this colour is permanently permitted in cosmetics intended for use in the area of the eye. See also 21 CFR 74.2340.		
CI 17200 <sup>36</sup>	Red				X	Also permitted in lip products at a maximum level of 3.0% in the finished product. And permitted in mouthwashes (including breath fresheners) and dentifrices. See also 21 CFR 74.2333. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. Usage ban of Zirconium containing complexes in aerosol package. For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.		
CI 19140 <sup>36</sup>	Yellow	x				E 102. The aluminium lake of this colour is permanently permitted in cosmetics intended for use in the area of the eye. See also 21 CFR 74.2705. All other lakes are permitted in all cosmetics, except those intended for use in the area of the eye, see 21CFR 82.1051 and 21 CFR 82.51. Usage ban of Zirconium containing complexes in aerosol package.		
CI 40800	Orange	Х				See also 21 CFR 73.2095. For products to South Korea: Usage ban.		
CI 42053	Green		x			See also 21 CFR 74.2203. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051 and 21 CFR 82.51.		

<sup>37</sup> This colorant has two different names as a certified colorant in USA. Therefore this colorant has two different criteria regarding purity, other requirements, limitations and field of application.

Permitted Colorants <sup>33</sup>	Colour	Field of Application <sup>34</sup>		on <sup>34</sup>	Other Requirements <sup>35</sup>			
		1	2	3	4			
CI 42090 <sup>37</sup>	Blue 4				х	See also 21 CFR 74.2104. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.		
	Blue 1	X				The aluminium lake of this colour is permitted in cosmetics generally, including cosmetics intended for use in the area of the eye. See also 21 CFR 74.2101. For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.		
CI 45350 <sup>37</sup>	Yellow				x	Maximum level in the finished cosmetic product should not exceed 6%. See also 21 CFR 74.2707. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.		
	Yellow				x	Maximum level in the finished cosmetic product should not exceed 6%. See also 21 CFR 74.2708. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.		
CI 45370 <sup>36</sup>	Orange				x	Also permitted in lip products at a maximum level of 5.0% in the finished product. And permitted in mouthwashes and dentifrices that are to be ingested. Not more than 1% 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid and 2% 2-(bromo-6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid. See also 21 CFR 74.2255. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. Usage ban of Zirconium containing complexes in aerosol package.		
CI 45380 <sup>36,37</sup>	Red		x			Not more than 1% 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid and 2% 2-(bromo-6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid. See also 21 CFR 74.2321. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. Usage ban of Zirconium containing complexes in aerosol package.		
	Red		X			Not more than 1% 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid and 2% 2-(bromo-6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid. See also 21 CFR 74.2322. All lakes are permitted as the ordinary colour, see 21 CFR 82.1051. Usage ban of Zirconium containing complexes in aerosol package.		

Permitted Colorants <sup>33</sup>			on <sup>34</sup>	Other Requirements <sup>35</sup>		
colorants		1	2	2 3		-
CI 45410 <sup>36,37</sup>	Red		Х			Not more than
						1% 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid
						and
						2% 2-(bromo-6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid.
						See also 21 CFR 74.2327. All lakes are permitted as the ordinary
						colour, see 21 CFR 82.1051.
						Usage ban of Zirconium containing complexes in aerosol package.
	Red		Х			Not more than
						1% 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid
						and
						2% 2-(bromo-6-hydroxy-3-oxo-3H-xanthen-9-yl) benzoic acid.
						See also 21 CFR 74.2328. All lakes are permitted as the ordinary
						colour, see 21 CFR 82.1051.
						Usage ban of Zirconium containing complexes in aerosol package.
CI 47000	Yellow				Х	See also 21 CFR 74.2711.
						For products to South Korea: Lakes of Strontium, Barium or
						Zirconium are prohibited.
CI 47005	Yellow		Х			E 104.
						See also 21 CFR 74.2710. All lakes are permitted as the ordinary
						colour, see 21 CFR 82.1051.
CI 59040	Green				х	Maximum level in the finished cosmetic product should not
						exceed 0.01%.
						See also 21 CFR 74.2208.
						For products to South Korea: Lakes of Strontium, Barium or Zirconium are prohibited.
CI 60725	Violet				х	See also 21 CFR 74.2602. All lakes are permitted as the ordinary
CI 00725	violet				~	colour, see 21 CFR 82.1051.
						For products to South Korea: Lakes of Strontium, Barium or
						Zirconium are prohibited.
CI 60730	Violet				х	See also 21 CFR 74.2602a.
CI 61565	Green				х	See also 21 CFR 74.2206. All lakes are permitted as the ordinary
0.01000	0.001					colour, see 21 CFR 82.1051.
						For products to South Korea: Lakes of Strontium, Barium or
						Zirconium are prohibited.
CI 61570	Green	Х				See also 21 CFR 74.2205. All lakes are permitted in all cosmetics,
						except those intended for use in the area of the eye, see 21 CFR
						82.1051.
						For products to South Korea: Lakes of Strontium, Barium or
						Zirconium are prohibited.
CI 73360	Red		Х			See also 21 CFR 74.2330. All lakes are permitted as the ordinary
						colour, see 21 CFR 82.1051.
						For products to South Korea: Lakes of Strontium, Barium or
						Zirconium are prohibited.
CI 75120	Orange	Х				E 160 b. See also 21 CFR 73.2030.
CI 75130	Orange	Х				E 160 a. See also 21 CFR 73.2095.
CI 75170	White	Х				See also 21 CFR 73.2329.

Permitted Colorants <sup>33</sup>	Colour	Field of Application <sup>34</sup>		on <sup>34</sup>	Other Requirements <sup>35</sup>		
		1	2	3	4		
CI 75470	Red	Х				E 120. See also 21 CFR 73.2087.	
CI 75810	Green			Only to be used in cosmetic dentifrices at a maximum level of 0.1% and only together with*: Water. Glycerine. 		0.1% and only together with*: Water. Glycerine. Sodium carboxymethylcellulose. Tetrasodium pyrophosphate. Sorbitol. Magnesium phosphate, tribasic. Calcium carbonate. Calcium phosphate, dibasic. Sodium N-lauroyl sarcosinate. Artificial sweeteners*. Flavours*. Preservatives*	
CI 77000	White			Х		E 173. See also 21 CFR 73.2645.	
CI 77007	Blue			Х		See also 21 CFR 73.2725.	
CI 77163	White	Х				See also 21 CFR 73.2162.	
CI 77266	Black	Х				See also 21 CFR 74.2052.	
CI 77288	Green			Х		Free from chromate ion. See also 21 CFR 73.2327.	
CI 77289	Green			Х		Free from chromate ion. See also 21 CFR 73.2326.	
CI 77400 <sup>37</sup>	Brown	Х				See also 21 CFR 73.2646.	
	Brown	Х				See also 21 CFR 73.2647.	
CI 77489	Orange	Х				E 172. See also 21 CFR 73.2250.	
CI 77491	Red	Х				E 172. See also 21 CFR 73.2250.	
CI 77492	Yellow	Х				E 172. See also 21 CFR 73.2250.	
CI 77499	Black	Х				E 172. See also 21 CFR 73.2250.	
CI 77510	Blue			Х		Free from cyanide ions. See also 21 CFR 73.2299.	
CI 77742	Violet	Х				See also 21 CFR 73.2775.	
CI 77820	White					Permitted in fingernail polishes at a maximum level of 1.0% in the finished product. E 174. See also 21 CFR 73.2500.	
CI 77891	White	Х				E 171. See also 21 CFR 73.2575.	
CI 77947	White	Х				See also 21 CFR 73.2991.	
Caramel	Brown	Х				E 150. See also 21 CFR 73.2085.	
Mica	Opaque	Х				See also 21 CFR 73.2496.	

### **10.** Permitted UV Filters in Cosmetic Products<sup>38</sup>

UV filters = ingredients which protects the skin/hair/nails from the harmful effects UV-light UV absorbers = Ingredients which protects the cosmetic product from the harmful effects of UV-light

This chapter is only applicable to UV filters.

Permitted UV filter CAS number	Limit/ Requirement	Permitted markets	Permitted co	mbinations <sup>39</sup>
	Requirement		1	2
Benzophenone-3 131-57-7	6%	All markets except USA	X	X
Benzophenone-4 4065-45-6	5%	All markets	х	x
Benzophenone-5 6628-37-1	5%	All markets	x	x
Butyl Methoxydibenzoylmethane 70356-09-1	3%	All markets		x
Ethylhexyl Dimethyl PABA 21245-02-3	8%	All markets	Х	
Ethylhexyl Methoxycinnamate 5466-77-3	7.5%	All markets except USA	X	x
Ethylhexyl Salicylate 118-60-5	5%	All markets	X	x
Homosalate 118-56-9	10%	All markets	x	x
Octocrylene 6197-30-4	10%	All markets		x
Phenylbenzimidazole Sulfonic Acid 27503-81-7	4%	All markets	X	
<b>Titanium Dioxide</b> 13463-67-7/ 1317-70-0/ 1317-80-2	25%	All markets	Х	

<sup>&</sup>lt;sup>38</sup> Products that contain the permitted UV filters, alone or in acceptable combination, with the purpose to protect the skin from UV-radiation are defined as a sunscreen product. Sunscreen products are defined as over the counter drugs in the U.S.A.

<sup>&</sup>lt;sup>39</sup> One formulation may contain one single UV filter or several UV filters in combination. UV filters marked by an X in column 1 may be combined in the same formulation. UV filters marked by an X in column 2 may be combined in the same formulation. No other combinations are permitted.

The concentration limit for each individual UV filter ingredient is valid when both single and multiple UV filters are used.

In formulations with two or more UV filters the concentration of each UV filter must be high enough to contribute SPF of 2 or more to the final product. For example, a formulation with UV filters "A and B" has SPF of 15, then A has to contribute with at least SPF of 2 and B with SPF of 13 or less; 2+13=15. (1+14=15 is not ok since 1<2)

#### **11. Permitted Preservatives in Cosmetic Products**

The listed preservatives can only be used if the conditions in the table are fulfilled.

Permitted prese	rvative CAS number	Conditions				
		Maximum concentration	Field of application			
Benzoic acid 65-	85-0	2.5% (as acid)	Rinse-off products, except oral			
Sodium Benzoat	<b>e</b> 532-32-1	1.7% (as acid)	Oral products			
		0.5% (as acid)	Leave-on products			
Salts of Benzoic	acid	0.5% (as acid)	All products			
potassium benzo MEA-benzoate, r benzoate, propyl isobutyl benzoat benzoate) 1863-0 553-70-8, 4337-0	zoate, calcium benzoate, bate, magnesium benzoate, nethyl benzoate, ethyl benzoate, butyl benzoate, e, isopropyl benzoate, phenyl 53-4, 2090-05-3, 582-25-2, 56-0, 93-58-3, 93-89-0, 50-7, 120-50-3, 939-48-0,					
propionate, calci propionate, pota	nd its salts (ammonium um propionate, magnesium ssium propionate, sodium 19-4, 17496-08-1, 4075-81-4, 2-8, 137-40-6	2% (as acid)	All products			
Salicylic acid and its salts <sup>40</sup>	Salicylic acid <sup>40</sup> 69-72-7	0.5% (as acid)	<ul> <li>All products except</li> <li>products for children under 3 years of age;</li> <li>oral products;</li> <li>in applications that may lead to exposure of the end-user's lungs by inhalation.</li> <li>Specific labelling requirement<sup>40</sup></li> </ul>			
	Calcium salicylate, magnesium salicylate, MEA- salicylate, sodium salicylate, potassium salicylate, TEA- salicylate), 824-35-1, 18917-89-0, 59866- 70-5, 54-21-7, 578- 36-9, 2174-16-5	0.5% (as acid)	All products except product for children under 3 years of age (except for shampoos). Specific labelling requirement <sup>40</sup>			

<sup>40</sup> Specific label requirement is according to the EU cosmetic regulation

Permitted preservative CAS number	Conditions	
	Maximum concentration	Field of application
Sorbic acid and its salts (calcium sorbate, sodium sorbate, potassium sorbate) 110-44-1, 7492-55-9, 7757-81-5, 24634-61- 5	0.6% (as acid)	All products
Zinc pyrithione 13463-41-7	0.5%	Rinse-off products except oral products
<b>Inorganic sulphites and hydrogensulphites</b> (sodium sulfite, ammonium bisulfite, ammonium sulfite, potassium sulfite, potassium hydrogen sulfite, sodium bisulfite, sodium metabisulfite, potassium metabisulfite) 7757-83-7, 10192-30-0, 10196-04-0, 10117-38-1, 7773-03-7, 7631-90-5, 7681-57-4, 16731-55-8	0.2% (as free SO <sub>2</sub> )	All products
Chlorobutanol 57-15-8	0.5%	All products except aerosol dispensers (sprays) Specific labelling requirement <sup>40</sup>
<b>4-Hydroxybenzoic acid</b> and its Methyl- and Ethylesters and their salts (methylparaben, potassium ethylparaben, potassium paraben, sodium methylparaben, sodium ethylparaben, ethylparaben, sodium paraben, potassium methylparaben, calcium paraben) <i>99-96-7</i> , <i>99-76-3, 36457-19-9, 16782-08-4, 5026-62-0,</i> <i>35285-68-8, 120-47-8, 114-63-6, 26112-07-2,</i> <i>69959-44-0</i>	0.4 % (as acid) for single ester 0.8 % (as acid) for mixtures of esters	All products
Butylparaben and its salts (sodium butylparaben, potassium butylparaben) 94-26-8, 36457-20-2, 38566-94-8 Propylparaben and its salts (sodium propylparaben, potassium propylparaben) 94-13-3, 35285-69-9, 84930-16-5	0.14 % (as acid) When mixed with other parabens, sum of conc.: 0.8% (as acid), but individual concentration for butylparaben and/or propylparaben shall not exceed 0.14 %	All products except leave-on products for application on the nappy area of children under 3 years of age. Specific labelling requirement <sup>41</sup>
Dehydroacetic acid 520-45-6, 16807-48-0 Sodium dehydroacetate 4418-26-2	0.6% (as acid)	All products except aerosol dispensers (sprays)
Formic acid 64-18-6 Sodium formate 141-53-7	0.5% (as acid)	All products
Dibromohexamidine Isethionate 93856-83-8	0.1%	All products

<sup>&</sup>lt;sup>41</sup> Specific label requirement is according to the EU cosmetic regulation.

Permitted preservative CAS number	Conditions	
	Maximum concentration	Field of application
Undecylenic acid and its salts (potassium undecylenate, sodium undecylenate, calcium undecylenate, TEA-undecylenate, MEA- undecylenate) 112-38-9, 6159-41-7, 3398-33-2, 1322-14-1, 84471-25-0, 56532-40-2	0.2% (as acid)	Rinse-off products
Hexetidine 141-94-6	0.1%	Rinse-off products
5-Bromo-5-nitro-1,3-dioxane 30007-47-7	0.1%	Rinse-off products Specific labelling requirement <sup>41</sup>
2-Bromo-2-nitropropane-1,3-diol 52-51-7	0.1%	All products Specific labelling requirement <sup>41</sup>
Dichlorobenzyl Alcohol 1777-82-8	0.15%	All products
Triclocarban <sup>42</sup> 101-20-2	0.2%	All products
Chloroxylenol 88-04-0	0.5%	All products
Imidazolidinyl urea 39236-46-9	0.6%	All products
Phenoxyethanol 122-99-6	1.0%	All products
Methenamine 100-97-0	0.15%	All products
Climbazole 38083-17-9	0.2%	Hair lotions
	0.2%	Face creams
	0.2%	Foot care products
	0.5%	Rinse-off shampoo
DMDM Hydantoin 6440-58-0	0.6%	All products
Benzyl alcohol 100-51-6	1.0%	All products
1-Hydroxy-4-methyl-6- (2,4,4-trimethyl-	1.0%	Rinse-off products
pentyl)-2-pyridon, Piroctone Olamine 50650-76-5, 68890- 66-4	0.5%	Leave-on products
Bromochlorophene 15435-29-7	0.1%	All products
o-Cymen-5-ol 3228-02-2	0.1%	All products
Chlorhexidine, Chlorhexidine diacetate, Chlorhexidine digluconate, Chlorhexidine dihydrochloride 55-56-1, 56-95-1, 18472-51-0, 3697-42-5	0.1% (as chlorhexidine)	Rinse-off products except products used on mucous membranes
	0.05% (as chlorhexidine)	Leave-on products except products used on mucous membranes
Phenoxyisopropanol 770-35-4	1.0%	Rinse-off products

<sup>42</sup> Purity criteria: 3, 3', 4,4'-Tetrachloroazobenzene < 1ppm; 3, 3', 4,4'-Tetrachloroazoxybenzene < 1ppm.

Permitted preservative CAS number	Conditions	
	Maximum concentration	Field of application
Behentrimonium chloride, Cetrimonium bromide, Cetrimonium chloride, Laurtrimonium bromide, Laurtrimonium	0.1%	All products except hair products
Chloride, Steartrimonium bromide, Steartrimonium chloride 17301-53-0, 57-09-0, 112-02-7, 1119-94-4, 112-00-5, 1120-02-1, 112-03-8		
Dimethyl Oxazolidine 51200-87-4	0.1%	pH > 6
Diazolidinyl Urea 78491-02-8	0.5%	All products
Hexamidine, Hexamidine diisethionate, Hexamidine diparaben, Hexamidine paraben 3811-75-4, 659-40-5, 93841-83-9, -	0.1%	All products
Glutaral 111-30-8	0.1%	All products except aerosols (sprays)
		Specific labelling requirement <sup>43</sup>
Chlorphenesin 104-29-0	0.3%	All products
Sodium Hydroxymehtylglycinate 70161-44-3	0.5%	All products
Benzethonium Chloride 121-54-0	0.1%	All products except oral leave- on products or products used on mucous membranes
Benzalkonium chloride, benzalkonium	0.1%	Rinse-off products
bromide, benzalkonium saccharinate 8001-54-5, 63449-41-2, 91080-29-4,	(as benzalkonium chloride)	Specific labelling requirement <sup>43</sup>
68989-01-5, 68424-85-1, 68391-01-5,	0.05%	Leave-on products
61789-71-7, 85409-22-9	(as benzalkonium chloride)	Specific labelling requirement <sup>43</sup>
Benzylhemiformal 14548-60-8	0.15%	Rinse-off products
lodopropynyl butylcarbamate 55406-53-6	Rinse-off product (a): 0.02%	All products except oral
	Leave-on product (b): 0.01%	products, lip products, body
	Deodorant, antiperspirant (c): 0.0075%	<ul> <li>lotion, body cream, aerosols and products intended for children under 3 years of age.</li> </ul>
		Specific labelling requirement <sup>44</sup>
Ethyl Lauroyl Arginate HCl 60372-77-2	0.4%	All products except oral products, lip products and spray products

 <sup>&</sup>lt;sup>43</sup> Specific label requirement is according to the EU cosmetic regulation.
 <sup>44</sup> Specific label requirement is according to the EU cosmetic regulation.

## **12.** Test Methods and Reporting Limits for Cosmetic Products

Restricted substance	Test method	Reporting limit
Antimony (Sb)	Extractable amount: DIN EN 71-3 with sweat simulant of DIN 53160	1 mg/kg
	Total content: Microwave digestion with aqua regia followed by ICP-MS	1 mg/kg
Arsenic (As)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
Cadmium (Cd)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
Chromium (Cr)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
Chromium (Cr <sup>6+</sup> )	Photometry/IC	Matrix dependent
Cobalt (Co)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
Cyclotetrasiloxane (D4)	GC-MS analysis	3 mg/kg
Diethylene glycol (DEG)	GC-MS analysis	500 mg/kg
Formaldehyde	Free formaldehyde: LC-MS analysis based on §64 LFGB K 84.00-7 (EG)	5 mg/kg
	Total content: derivatisation with DNPH followed by LC-MS analysis	20 mg/kg
Fragrance allergens	GC-MS analysis after extraction with ethylacetate	5 mg/kg
Lead (Pb)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
Mercury (Hg)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	0.1 mg/kg
Methylene chloride	GC-MS analysis after extraction with ethylacetate	1 mg/kg
Nickel (Ni)	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
2-Nitro-p-phenylene diamine	GC-MS analysis	Matrix dependent
4-Nitro-o-phenylene diamine	GC-MS analysis	Matrix dependent
Nitrosamines	GC-MS analysis	10-50 μg/kg
Nonylphenol ethoxylates (NPE)	LC-MS analysis	40 mg/kg
Octylphenol ethoxylates (OPE)	LC-MS analysis	40 mg/kg
Phthalates (except diethylphthalate)	GC-MS analysis after extraction with THF/methanol	25 mg/kg
Residual solvents	GC-MS-Headspace analysis	1 mg/kg
Silver (Ag) and its salts	Total content: Microwave digestion with HNO <sub>3</sub> followed by ICP-MS	1 mg/kg
Triclosan	GC and/or LC-MS analysis after extraction with methanol	1-500 mg/kg

#### **13. Version History**

Version history information is available in the separate file *History and Sources COSMETICS*.