PHASE-OUT LIST

for chemicals hazardous to the environment and human health in products



Stockholm County Council

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1 Aim

The aim of the phase-out list is to define the chemicals hazardous to the environment and human health which are relevant for the County Council to phase out.

2 Application

Stockholm County Council's phase-out list for products must be used in conjunction with the purchase and procurement of products and services which entail the use of products. The phase-out list must be followed by all County Council operations. In conjunction with procurements and purchases, a requirement must be imposed for the products to be free from the listed substances. The selection of substances is adapted to products which are in demand based on availability and alternatives in the market. If applicable, additional chemical requirements may

be imposed concerning the contents of a product. The substances in the list are considered to be a constituent of a product regardless of whether they have been added intentionally or occur as a contaminant or residue from the manufacturing process in a concentration exceeding 0.1 percent.

The list only includes chemicals and not, as previously, materials. PVC is a phase-out material in accordance with a separate decision by the County Council Assembly.

3 Definitions

Table 1	Table 1				
Concept	Definition				
Concentration limit for constituent substance	A substance is considered to be a constituent in a product if it occurs in a concentration 0.1 % (weight percent) of the relevant component of a composite product in accordance with the principle of "once a product, always a product".				
The Candidate List (C)	The European Chemicals Agency's (ECHA) List of Substances of Very High Concern ² .				
Chemical	Chemical substance or mixture of chemical substances which is manufactured or extracted and whose function is primarily determined by its chemical composition.				
Criteria groups³	The hazard statements and associated codes which form the basis for the assessment 'hazardous to human health and/or the environment'4.				
Medical device	A product which according to the manufacturer's information is to be used to demonstrate, prevent, monitor, treat or palliate an illness or injury ⁵ .				
PRIO database (P)	Web-based database developed by the Swedish Chemicals Agency containing examples of hazardous substances ⁶ .				
REACH Regulation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), and establishing a European Chemicals Agency				
SIN list (SIN)	List prepared by ChemSec in collaboration with leading researchers. Based on same criteria for substances of very high concern as the Candidate List ⁷ .				
Phase-out substance ³	Chemical which is to be phased out within the County Council. Phase-out substances relate to targets and guidelines for the environmental work of the County Council.				

¹ http://www.kemi.se/global/broschyrer/vagledning-for-leverantorer-av-varor-sv.pdf

² https://www.echa.europa.eu/candidate-list-table 3 Note that these are Stockholm County Council's definitions.

⁴ Established pursuant to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, the CLP Regulation.

⁵ In accordance with Directive 93/42/EEC concerning medical devices (MDD)

⁶ http://www.kemi.se/prio-start

⁷ http://sinlist.chemsec.org/

4 Instructions

4.1 Established criteria

The selection of substances for inclusion in the phase-out list is based on a number of criteria. These criteria consist of hazard statements and associated hazard codes⁸, and act as a supplement to the lists of phase-out substances, as there are other substances on the market which may be hazardous to human health and/or the environment as well as those

included in the lists. To ensure that products containing other substances with similar or even more hazardous properties than those included in the lists are not purchased or procured, the criteria can be used to assess the substances. The properties which constitute criteria group 1 are more hazardous than the properties which constitute criteria group 2.

Table 2 Criteria group 1	
Hazard statement	Hazard statement code
May cause cancer	H350
May cause genetic defects	H340
May damage fertility or the unborn child	H360
May cause harm to breast-fed children	H362
May cause allergy or asthma symptoms or breathing difficulties if inhaled	H334
Fatal if inhaled	H330
Fatal in contact with skin	H310
Fatal if swallowed	H300
Very toxic to aquatic life with long lasting effects	H410
Harms public health and the environment by destroying ozone in the upper atmosphere	EUH059, H420
PBT and vPvB substances in accordance with Annex XIII to REACH	
Potential PBT and vPvB substances in accordance with Annex XIII to REACH	
Other substances which probably have severe effects on human health or the environment (e.g. endocrine disruptors) in accordance with Article 57(f) of REACH	
Metals of very high concern (Cd, Hg, Pb) and their compounds	

Table 3 Criteria group 2						
Hazard statement	Hazard statement code					
Suspected of causing cancer	H351					
Suspected of causing genetic defects	H341					
Suspected of damaging fertility or the unborn child	H361					
May cause an allergic skin reaction	H317					
Causes damage to organs	H370					
May cause damage to organs	H371					
Causes damage to organs through prolonged or repeated exposure	H372					
Very toxic to aquatic life	H400					
Toxic to aquatic life with long lasting effects	H411					
Harmful to aquatic life with long lasting effects	H412					
May cause long lasting harmful effects to aquatic life	H413					
Toxic in contact with skin	H311					
Toxic if inhaled	H331					

⁸ Established pursuant to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, the CLP Regulation.

4.2 Phase-out list

4.2.1 Phase-out substances for products within the category 'General materials and services'

In conjunction with the procurement and purchasing of products and consumables within the category 'General materials and services', a requirement must be imposed according to which the products must be free from the listed substances. The selection of substances is adapted to products which are in demand based on availability and alternatives in the market. The category includes, for example, office equipment, art and printed matter.

Substance group	Substance name	CAS-number	Reason for phasing out	Example areas of use
Antimicrobial	Silver compounds	multiple	Hazardous to the environment	Office equipment
substances ⁹	Triclosan	3380-34-5	Environmentally hazardous with long lasting effects	Office equipment
Metals	Lead compounds	multiple, e.g. 12656-85-8, 301-04-2	Candidate, SIN, Reproductive toxicant, Causes damage to organs, Hazardous to the environment with long lasting effects	Ink, glaze for ceramics
	Cobalt sulphate	10124-43-3	Candidate, SIN, May cause cancer, May cause allergy, Hazardous to the environment with long lasting effects	Ink, glaze for ceramics
	Cadmium compounds	multiple	Candidate, SIN, May cause cancer, Reproductive toxicant, Causes damage to organs, Hazardous to the environment with long lasting effects	Dyes/paints, glaze for ceramics
	Chromium compounds	multiple	Candidate, SIN, Reproductive toxicant, Causes damage to organs, Hazardous to the environment with long lasting effects	Glaze for ceramics
	Nickel com- pounds ¹⁰	multiple	May cause allergy, May cause cancer	Office equipment, glaze for ceramics
Parfumes	Applies to listed pe Appendix 5	rfumes in	May cause allergy	Office equipment
Additives to plastic	Bisphenol A ¹¹	80-05-7	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Bisphenol F ¹¹	87139-40-0	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Bisphenol S ¹¹	80-09-1	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Applies to listed ph Appendix 4	thalates in	Candidate, SIN, Suspected endocrine disruptor	Plasticizer
	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environment with long lasting effects, May cause cancer	Office equipment

⁹ Applies when the substance is intentionally added for antimicrobial purposes. 10 Only applies to nickel in contact with skin.

¹¹ In free form (not bound to the material)

4.2.2 Phase-out substances for products within the category 'Property'

In conjunction with the procurement and purchasing of products and consumables within the category 'Property', a requirement must be imposed according to which the products must be free from the listed substances. The selection of substances for inclusion is adapted to products which are in demand based on availability and alternatives in the

market. The category includes, for example, kitchen utensils, white goods and equipment for textile care.

Construction products, i.e. materials and products or building kits which are manufactured and placed on the market in order to permanently form part of a structure are not covered by the phase-out list.

Table 5						
Substance group	Substance name	CAS number	Reason for phasing out	Example areas of use		
Antibacterial substances ¹²	Copper com- pounds	multiple	Hazardous to the environment	Electronics, kitchen utensils		
	Silver compounds	multiple	Hazardous to the environment	Electronics, kitchen utensils		
	Triclosan	3380-34-5	Environmentally hazardous with long lasting effects	Surface layer, detergent		
Flame retardants	Applies to listed flame retardants in Appendix 2		Candidate	Electronics		
Fluorinated substances	Applies to listed fluorinated substances in Appendix 3		Candidate, SIN, Hazardous to the environment with long lasting effects	Kitchen utensils, non-stick coating		
Metals	Nickel com- pounds ¹³	multiple	May cause allergy, May cause cancer	Electronics Kitchen utensils		
Additives to plastic	Bisphenol A ¹⁴	80-05-7	Suspected endocrine disruptor	Dirt-repellant surface layer, paper		
	Bisphenol F ¹⁴	87139-40-0	Suspected endocrine disruptor	Dirt-repellant surface layer, paper		
	Bisphenol S ¹⁴	80-09-1	Suspected endocrine disruptor	Dirt-repellant surface layer, paper		
	Applies to listed phthalates in Appendix 4		Candidate, SIN, Suspected endocrine disruptor	Plasticizer		
	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environment with long lasting effects, May cause cancer	Electronics, plasticizers in plastic and rubber		

 $^{12\} Applies\ when\ the\ substance\ is\ intentionally\ added\ for\ antimicrobial\ purposes.$

¹³ Only applies to nickel in contact with skin.

¹⁴ In free form (not bound to the material)

4.2.3 Phase-out substances for products within the category 'IT and Communication'

In conjunction with the procurement and purchasing of products and consumables within the category 'IT and Communication', a requirement must be imposed according to which the products must be free from the listed substances. The selection of

substances for inclusion is adapted to products which are in demand based on availability and alternatives in the market. The category includes, for example, personal computers, servers and printers.

Substance group	Substance name	CAS number	Reason for phasing out	Example areas of use
Flame retardants	Applies to listed fla	me retardants	Candidate, SIN	Electronics, plastic
Colouring agents	Applies to listed az	o dyes in	Candidate, SIN	Plastic, dyes/paints
Metals	Arsenic com- pounds	multiple, e.g. 15606-95-8, 1303-28-2	Candidate, SIN, May cause cancer	Screens
	Beryllium com- pounds	multiple, e.g. 1304-56-9, 7440-41-7	SIN, May cause cancer, May cause allergy	Electronics
	Chromium compounds	multiple	Candidate, SIN, Reproductive toxicant, Causes damage to organs, Hazardous to the environment with long lasting effects	Dyes/paints
Additives to plastic	Bisphenol A ¹⁵	25036-25-3	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Bisphenol F ¹⁵	28064-14-4	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Bisphenol S ¹⁵	80-09-1	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Applies to listed ph Appendix 4	thalates in	Candidate, SIN, Suspected endocrine disruptor	Plasticizer
	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environment with long lasting effects, May cause cancer	Plasticizer
	Tin compounds	multiple	Candidate	Stabiliser
	Tris(2-ethylhexyl) benzene-1,2,4-tri- carboxylate (TOTM)	3319-31-1	Reproductive toxicant, PBT	Plasticizer

4.2.4 Phase-out substances for products within the category 'Vehicles'

In conjunction with the procurement and purchasing of products within the category 'Vehicles', a requirement must be imposed according to which the products must be free from the listed substances. The selection of substances for inclusion is adapted

to products which are in demand based on availability and alternatives in the market. The category includes, for example, trains, cars and emergency vehicles.

Table 7					
Substance group	Substance name	CAS number	Reason for phasing out	Example areas of use	
Flame retardants	Applies to listed fla Appendix 2	me retardants in	Hazardous to the environment with long lasting effects, Candidate, SIN	Electronics, textiles	
Fluorinated compounds	Applies to listed fluorinated compounds in Appendix 3		Candidate, SIN, Hazardous to the environment with long lasting effects	Dirt- and water- repellant	
Metals	Arsenic compounds	multiple, e.g. 15606-95-8, 1303-28-2	Candidate, SIN, May cause can- cer, Hazardous to the environ- ment with long lasting effects	Screens	
	Chromium compounds	multiple	Candidate, SIN, May cause cancer, Reproductive toxicant, Causes damage to organs, Hazardous to the environment with long lasting effects	Dyes/paints	
Additives to plastic	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environment with long lasting effects, May cause cancer	Plasticizer, rubber, tyres	
Other substances	Isocyanates	multiple, e.g. 101-68-8	May cause allergy	Binding agent in dyes/ paints, glue and varnish	

4.2.5 Phase-out substances for products within the category 'Facility

In conjunction with the procurement and purchasing of products and consumables within the category 'Facility Management', a requirement must be imposed according to which the products must be free from the listed substances. The selection of sub-

stances for inclusion is adapted to products which are in demand based on availability and alternatives in the market. The category includes, for example, furniture, household products, cleaning materials and coffee machines.

Table 8				
Substance group	Substance name	CAS number	Reason for phasing out	Example areas of use
Antimicrobial substances ¹⁶	Copper compounds	multiple	Hazardous to the environment	Surface layer, handles
	Silver compounds	multiple	Hazardous to the environment	Surface layer, handles
	Triclosan	3380-34-5	Environmentally hazardous with long lasting effects	Surface layer, chemicals
Flame retardants	Applies to listed fla Appendix 2	ime retardants in	Candidate, SIN, Suspected endocrine disruptor	Electronics, textiles
Fluorinated compounds	Applies to listed fluin Appendix 3	orinated compounds	SIN, Candidate, Suspected endocrine disruptor, PBT	Dirt- and water- repellant
Colouring agents	Applies to listed az	o dyes in Appendix 1	Candidate, SIN, May cause cancer, May cause allergy	Plastic, textiles
Metals	Chromium compounds	multiple	Candidate, SIN, May cause cancer, Hazardous to the environment with long lasting effects, Reproductive toxicant, Causes damage to organs	Tanning of leather
Textile processing agent	Alkylphenol ethoxylates	104-35-8, 104-40-5, 14409-72-4, 156609- 10-8, 20427-84-3, 25154-52-3, 26027- 38-3, 27942-27-4, 34166-38-6, 68412- 54-4, 84852-15-3, 9016-45-9	SIN, Candidate, Hazardous to the environment, Suspected endocrine disruptor	Fungicide, surface treatment
	N, N-dimethy- lacetamide (DMAC)	127-19-5		Textile treatment
Additives to plastic	Bisphenol A ¹⁷	25036-25-3	Candidate, Reproductive toxicant	Dirt-repellant surface layer, paper
	Bisphenol F ¹⁷	28064-14-4	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Bisphenol S ¹⁷	80-09-1	Suspected endocrine disruptor	Dirt-repellant surface layer, paper
	Applies to listed ph Appendix 4	thalates in	SIN, Candidate, Suspected endocrine disruptor	Plasticizer in synthetic leather
	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environment with long lasting effects, May cause cancer	Plasticizer
Other substances	Formaldehyde	50-00-0	SIN, May cause allergy, May cause cancer	Preservative, glue, varnish, chipboard
	Isocyanates	multiple, e.g. 101-68-8	May cause allergy	Binding agent in dyes/paints, glue and varnish

¹⁶ Applies when the substance is intentionally added for antimicrobial purposes.

¹⁷ In free form (not bound to the material)

4.2.6 Phase-out substances for products within the category 'Healthcare-related equipment, textiles and aids'

In conjunction with the procurement and purchasing of products and consumables within the category 'Healthcare-related equipment, textiles and aids', a requirement must be imposed according to which the products must be free from the listed substances. The selection of substances for inclusion is

adapted to products which are in demand based on availability and alternatives in the market. The category includes textiles, washer-disinfectants, autoclave, wheelchairs, walking frames, electric lifts, beds and medical examination furniture.

Table 9				
Substance group	Substance name	CAS number	Reason for phasing out	Example areas of use
Antimicrobial products ¹⁸	Copper compounds		Hazardous to the environment	Textiles, surface layer
	Polyhexamethylene biguanide (PHMB) and its compounds	28757-47-3, 32289-58-0, 28757-48-4	May cause allergy, Environ- mentally hazardous with long lasting effects	Surface layer, chemicals
	Silver compounds		Hazardous to the environment with long lasting effects	Textiles, surface layer
	Triclosan	3380-34-5	Hazardous to the environment	Surface layer, chemicals
	Triclocarban	101-20-2	Hazardous to the environment with long lasting effects	Surface layer, chemicals
Flame retardants	Applies to listed fla Appendix 2	me retardants in	SIN, Candidate, Suspected endocrine disruptor	Electronics, textiles
Fluorinated compounds	Applies to listed fluin Appendix 3	orinated compounds	SIN, Candidate, Suspected endocrine disruptor	Dirt- and water- repellant
Colouring agents	Applies to listed azo dyes in Appendix 1		Candidate, SIN, May cause allergy	Plastic, textiles
	Lead chromates	12656-85-8, 1344-37-2, 7758-97-6	Candidate, SIN, Reproductive toxicant, May cause cancer, Hazardous to the environment with long lasting effects	Plastic, textiles
Metals	Nickel compounds ¹⁹	flera	May cause allergy, May cause cancer	
Textile processing agent	Alkylphenol ethoxylates	104-35-8, 104-40-5, 14409-72-4, 156609- 10-8, 20427-84-3, 25154-52-3, 26027- 38-3, 27942-27-4, 34166-38-6, 68412- 54-4, 84852-15-3, 9016-45-9	SIN, Candidate, Hazardous to the environment with long lasting effects	Textile treatment
	Formaldehyde	50-00-0	May cause allergy, May cause cancer	Preservative
	N, N-dimethy- lacetamide (DMAC)	127-19-5	Reproductive toxicant	Textile treatment
	Pentachloro- phenol (PCP)	87-86-5	Hazardous to the environment with long lasting effects, May cause cancer	Textile treatment, preservative
Additives to plastic	Applies to listed ph	thalates in Appendix 4	SIN, Candidate, Suspected endocrine disruptor	Plasticizer
	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environment with long lasting effects, May cause cancer	Plasticizer

¹⁸ Applies when the substance is intentionally added for antimicrobial purposes.

 $^{19\ \} Only\ applies\ to\ nickel\ in\ contact\ with\ skin.$

4.2.7 Phase-out substances for products within the category 'Healthcare-related consumables'

In conjunction with the procurement and purchasing of products and consumables within the category 'Healthcare-related consumables', a requirement must be imposed according to which the products must be free from the listed substances. The selection of substances for inclusion is adapted

to products which are in demand based on availability and alternatives in the market. The category includes diabetes-specific consumables, dressings, catheters, implants and products for wound care and incontinence.

Table 10				
Substance groups	Substance name	CAS number	Reason for phasing out	Example areas of use
Antimicrobial products ²⁰	Chlorhexidine and its compounds	multiple, e.g. 55-56-1	Hazardous to the environment	Dressings, oral care sticks
	Copper compounds	multiple	Hazardous to the environment	Dressings, surface layer, handles
	Polyhexamethylene biguanide (PHMB) and its compounds	28757-47-3, 32289-58-0, 28757-48-4	PRIO, May cause allergy, Hazardous to the environ- ment with long lasting effects	Dressings, chemicals
	Polyhexamethylene guanidine hydrochlo- ride (PHMG)	57028-96-3	Hazardous to the environ- ment with long lasting effects, May cause allergy	Dressings
	Silver compounds	multiple	Hazardous to the environ- ment with long lasting effects	Dressings, textiles, catheters
	Triclosan	3380-34-5	Hazardous to the environment	Dressings, sutures, chemicals
	Triclocarban	101-20-2	Hazardous to the environ- ment with long lasting effects	Dressings, chemicals
	Bismuth compounds	multiple 1304-76-3, 14882-18-9, 5175-83-7	Hazardous to the environment	Dressings
Flame retardants	Applies to listed flame retardants in Appendix 2		SIN, Candidate, Suspected endocrine disruptor	Textile, plastic
Fluorinated compounds	Applies to listed fluorinate Appendix 3	ted compounds in	SIN, Candidate, Suspected endocrine disruptor	Dirt- and water-repellant
Colouring agents	Lead chromates	12656-85-8, 1344-37-2, 7758-97-6	Candidate, SIN, Reproductive toxicant, May cause cancer, Hazardous to the environment with long lasting effects	Colouring agent
	Applies to listed azo com	pounds in Appendix 1		Colouring agent
	Chromium compounds	multiple	Candidate, SIN, May cause cancer, Reproductive toxicant, Causes damage to organs, Hazardous to the environment with long lasting effects	Dye, tanning of leather
	Nickel compounds ²¹	multiple	May cause allergy, May cause cancer	Metal parts
Additives to plastic	Bisphenol A ²²	25036-25-3	May cause allergy, May cause cancer	Dirt-repellant surface layer, paper, plasticizer
	Bisphenol F ²²	28064-14-4	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Bisphenol S ²²	80-09-1	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Applies to listed phthala	ates in Appendix 4	Suspected endocrine disruptor	Plasticizer

²⁰ Applies when the substance is intentionally added for antimicrobial purposes.

²¹ Only applies to nickel in contact with skin.

²² In free form (not bound to the material)

Table 10 cont.					
Substance groups	Substance name	CAS number	Reason for phasing out	Example areas of use	
	Polyaromatic hydrocarbons (PAH)	multiple	Hazardous to the environ- ment with long lasting effects, May cause cancer	Plasticizer in plastic or rubber	
	Tris(2-ethylhexyl) benzene-1,2,4-tricar- boxylate (TOTM)	3319-31-1	Reproductive toxicant, PBT	Plasticizer	
	Triphenyl phosphate	115-86-6	SIN, Hazardous to the envi- ronment, Suspected endo- crine disruptor	Plasticizer in plastic or rubber	
Other substances	Isocyanates	Multiple, e.g. 101-68-8	May cause allergy	Plaster	
	Colophonium (rosin) and its derivatives	8050-09-07, 8052- 10-6, 73138-82-6	May cause allergy	Glue	
	Lanolin	8006-54-0	May cause allergy	Glue, dressings	

4.2.8 Phase-out substances for products within the category 'Pharmaceuticals and associated services'

In conjunction with the procurement and purchasing of products and consumables within the category 'Pharmaceuticals and associated services', a requirement must be imposed according to which the products must be free from the listed substances.

The selection of substances for inclusion is adapted to products which are in demand based on availability and alternatives in the market. The category includes accessories for equipment for medical gases and dose dispensing.

Substance groups	Substance name	CAS number	Reason for phasing out	Example areas of use
Antimicrobial products ²³	Chlorhexidine and its compounds	multiple, e.g. 55-56-1	Hazardous to the environment	Dressings, oral care sticks
	Polyhexamethylene biguanide (PHMB) and its compounds	28757-47-3, 32289-58-0, 28757-48-4	PRIO, May cause allergy, Hazardous to the environment with long lasting effects	Dressings, chemicals
	Polyhexamethylene guanidine hydrochlo- ride (PHMG)	57028-96-3	Hazardous to the environment with long lasting effects, May cause allergy	Dressings
	Silver compounds	multiple	Hazardous to the environment with long lasting effects	Dressings, textiles, catheters
	Triclosan	3380-34-5	Hazardous to the environment	Dressings, sutures, chemicals
	Triclocarban	101-20-2	Hazardous to the environment with long lasting effects	Dressings, chemicals
Flame retardants	Applies to listed flame re Appendix 1	etardants in	SIN, Candidate, Suspected endocrine disruptor, PBT	Electronics, textiles
Additives to plastic	Bisphenol A ²⁴	25036-25-3	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Bisphenol F ²⁴	28064-14-4	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Bisphenol S ²⁴	80-09-1	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Applies to listed phthala	ates in Appendix 4	SIN, Candidate, Suspected endocrine disruptor	Plasticizer
	Tris(2-ethylhexyl) benzene-1,2,4-tricar- boxylate (TOTM)	3319-31-1	Reproductive toxicant, PBT	Plasticizer

 $^{{\}tt 23\ Applies\ when\ the\ substance\ is\ intentionally\ added\ for\ antimicrobial\ purposes.}$

²⁴ In free form (not bound to the material)

4.2.9 Healthcare and dental care-related services

In conjunction with procurement within the category 'Healthcare and dental care-related services', a requirement for the use of products free from substances hazardous to health and the environment in

accordance with the phase-out list shall be imposed. Depending on the type of products included in the service, requirements must be imposed in accordance with the relevant category.

4.2.10 Phase-out substances for products within the category 'Medical devices and related consumables'

In conjunction with the procurement and purchasing of products and consumables within the category 'Medical devices and related consumables', a requirement must be imposed according to which the products must be free from the listed substances. The selection of substances for inclusion is adapted

to products which are in demand based on availability and alternatives in the market. The category includes, for example, equipment for anaesthesia, diagnostics, X-ray and surgical operations, and associated consumables.

Substance groups	Substance name	CAS number	Reason for phasing out	Example areas of use
Antimicrobial products ²⁵	Chlorhexidine and its compounds	multiple, e.g. 55-56-1	Hazardous to the environ- ment	Dressings, oral care stick
	Copper compounds	multiple	Hazardous to the environment	Dressings, surface layer, handles
	Polyhexamethylene biguanide (PHMB) and its compounds	28757-47-3, 32289-58-0, 28757-48-4	PRIO, May cause allergy, Haz- ardous to the environment with long lasting effects	Dressings, chemicals
	Polyhexamethylene guanidine hydrochlo- ride (PHMG)	57028-96-3	Hazardous to the environ- ment with long lasting effects, May cause allergy	Dressings
	Silver compounds	multiple	Hazardous to the environ- ment with long lasting effects	Dressings, textiles, catheters
	Triclosan	3380-34-5	Hazardous to the environment	Dressings, sutures, chemicals
	Triclocarban	101-20-2	Hazardous to the environ- ment with long lasting effects	Dressings, chemicals
	Bismuth compounds	multiple, e.g. 1304- 76-3, 14882-18-9, 5175-83-7	Hazardous to the environment	Dressings
Flame retardants	Applies to listed flame re Appendix 2	etardants in	SIN, Candidate, Suspected endocrine disruptor, PBT	Electronics, textiles
Fluorinated compounds	Applies to listed fluoring in Appendix 3	ated compounds	SIN, Candidate, Suspected endocrine disruptor, PBT	Dirt- and water-repellan
Additives to plastic	Bisphenol A ²⁶	25036-25-3	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Bisphenol F ²⁶	28064-14-4	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Bisphenol S ²⁶	1980-09-01	Suspected endocrine disruptor	Dirt-repellant surface layer, paper, plasticizer
	Applies to listed phthalates in Appendix 1		SIN, Candidate, Suspected endocrine disruptor	Plasticizer
	Polyaromatic hydro- carbons (PAH)	multiple	Hazardous to the environ- ment with long lasting effects, May cause cancer	Plasticizer in plastic or rubber
	Tris(2-ethylhexyl) ben- zene-1,2,4-tricarboxy- late (TOTM)	3319-31-1	Reproductive toxicant, PBT	Plasticizer
	Triphenyl phosphate	115-86-6	SIN, Hazardous to the envi- ronment, Suspected endo- crine disruptor	Plasticizer in plastic or rubber

²⁵ Applies when the substance is intentionally added for antimicrobial purposes.

²⁶ In free form (not bound to the material)

4.3 Appendix

4.3.1 Appendix 1: List of azo dyes

Substance name	CAS number	Reason for phasing out	Example areas of use
Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl) azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6- (phenyl azo)naphthalene-2,7-disulphonate	1937-37-7	Candidate, SIN, May cause cancer	Leather, plastic, synthetic materials
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)] bis(4-aminonaphthalene-1-sulphonate)	573-58-0	Candidate, SIN, May cause cancer, Reproductive toxicant	Glass, textile, paper
4-o-tolylazo-o-toluidine	97-56-3	Candidate, SIN, May cause cancer	
(6-(4-hydroxy-3-(2-methoxyphenylazo) -2- sulfonato-7-naphthylamino) - 1,3,5-triazine- 2,4-diyl) bis[(amino-1-methylethyl) ammo- nium] format	108225-03-2	SIN, May cause allergy, Haz- ardous to the environment	Glass, textile, paper
Disodium [5-[[4'-[[2,6-dihydroxy-3-[(2-hydroxy-5-sulphophenyl) azo] phenyl] azo] [1,1'-biphenyl]-4-yl]azo]salicyl(4-)]cuprate(2-) (CI Direct Brown 95)	16071-86-6	SIN, May cause cancer	Glass, textile, paper
Trisodium [4'-(8-acetylamino-3,6-disulphona-to-2-naphthylazo) - 4''-(6-benzoylamino-3-sulphonato-2-naphthylazo)-biphenyl-1,3',3'',1'''-tetraolato-O, O', O'', O'''] copper salt	164058-22-4	SIN, May cause cancer	
Tetrasodium 3,3'-[[1,1'-biphenyl]-4,4'-diyl bis(azo)]bis[5-amino-4-hydroxynaphtha- lene-2,7-disulphonate]	2602-46-2	SIN, May cause cancer, Reproductive toxicant	Glass, textile, paper
4-aminoazobenzene	60-09-3	Candidate, SIN, May cause cancer, Hazardous to the environment with long lasting effects	Varnish, wax products

4.3.2 Appendix 2: List of flame retardants

Flame retardants commonly occur in electronics, but can also be used to protect textiles and plastics.

Appendix 2		
Substance name	CAS number	Reason for phasing out
1,1'-(ethane-1,2-diyl) bis[pentabro- mobenzene] (DBDPE)	84852-53-9	SIN, PBT
Decabromodiphenyl ether (DecaBDE)	1163-19-5	SIN, Candidate, Suspected endocrine disruptor, Use in electrical and electronic products in accordance with the ROHS Directive is prohibited
Hexabromocyclododecane (HBCDD)	134237-50-6, 134237-51-7, 134237-52-8, 25637-99-4, 3194-55-6, 25637-99-4	SIN, Candidate, PBT
Medium chain chlorinated paraffins (MCCP)	85535-85-9	SIN, May cause cancer, Suspected endocrine disruptor
Polybrominated biphenyls (PBB)	multiple 59536-65-1	Substance which probably has severe effects on human health or the environment ²⁷ , Use in electrical and electronic products in accordance with the ROHS Directive is prohibited.
Tetrabromobisphenol A (TBBP-A)	79-94-7	SIN, Suspected endocrine disruptor
Tris(2-chloroethyl) phosphate	115-96-8	SIN, Candidate, May cause cancer, Reproductive toxicant
Tris(1-aziridinyl)phosphine oxide	545-55-1	Substance which probably has severe effects on human health or the environment ²⁷
Tris(2-chloroethyl) phosphate	115-96-8	SIN, Candidate, May cause cancer, Hazardous to the environment, Reproductive toxicant
Tris(1,3-dichloro-2-propyl) phosphate (TDCP)	13674-87-8	SIN, May cause cancer
Tris(2,3-dibromo-propyl) phosphate	126-72-7	May cause cancer

4.3.3 Appendix 3: List of fluorinated compounds

Fluorinated compounds are often used as a surface treatment in order to add dirt- and water-repellent properties to a material. They also act as flame retardants. Fluorinated compounds can be used both on textiles and on plastic and metal products. They are persistent in nature and many of them are reproductive toxicants.

Appendix 3		
Swedish name	CAS number	Reason for phasing out
Heneicosafluoroundecanoic acid (PFUnDA)	2058-94-8	Candidate, SIN, vPvB ²⁸
Heptadecafluorooctane -1 sulphonic acid (PFOS) and its derivatives	1763-23-1, 2795- 39-3, 29081-56-9, 29457-72-5, 70225-14-8	SIN, May cause cancer, Reproductive toxicant, Hazardous to the environment with long lasting effects
Heptacosafluoro-tetradecanoic acid (PFTeDA)	376-06-7	Candidate, SIN, vPvB
Pentadecafluorooctanoic acid (PFOA)	335-67-1	Candidate, SIN, Reproductive toxicant, Hazardous to the environment with long lasting effects
Pentacosafluorotridecanoic acid (PFTrDA)	72629-94-8	Candidate, SIN, vPvB
Perfluoro butanesulphonate (PFBS)	375-73-5	Substance which probably has severe effects on human health or the environment ²⁹
Perfluoro butanesulphonate (PFBS)	29420-49-3	Substance which probably has severe effects on human health or the environment ²⁹
Perfluoroheptanoic acid (PFHpA)	375-85-9	Substance which probably has severe effects on human health or the environment ²⁸
Perfluorohexanoic acid (PFHxA)	307-24-4	Substance which probably has severe effects on human health or the environment ²⁹
Perfluoro-hexanesulphonate (PFHxS)	355-46-4	Environmentally hazardous with long lasting effects
Perfluorononanoic acid (PFNA)	375-95-1	Candidate, SIN, May cause cancer, Reproductive toxicant
Perfluorooctanoic acid, the ammonium salt (APFOA)	3825-26-1	Candidate, SIN, Hazardous to the environment with long lasting effects
Perfluorovaleric acid (PFPeA)	2706-90-3	Substance which probably has severe effects on human health or the environment ²⁹
Tricosafluorododecanoic acid (PFDoDA)	307-55-1	Candidate, SIN, vPvB

²⁸ vPvB means that the substance is persistent and bioaccumulates 29 See Criteria group 1, Table 2

4.3.4 Appendix 4: List of phthalates

Phthalates are used as plasticizers in plastic.

Substance name	CAS number	Reason for phasing out
2-Benzenedicarboxylic acid, dihexyl ster, branched and linear	68515-50-4	Candidate, Suspected endocrine disruptor
nzyl butyl phthalate (BBP)	85-68-7	Candidate, Endocrine disrupter
(2-ethylhexyl) phthalate (DEHP)	117-81-7	Candidate, Endocrine disrupter
(2-methoxyethyl) phthalate	117-82-8	Candidate, Suspected endocrine disruptor
(branched C6-C8) alkyl phthalates	71888-89-6	Candidate, Suspected endocrine disruptor
(branched and straight C7-C11) cyl phthalates	68515-42-4	Candidate, Suspected endocrine disruptor
outyl phthalate (DBP)	84-74-2	Candidate, Endocrine disrupter
C6-C10- alkyl phthalate and di- C6, C10- alkyl phthalate	68515-51-5, 68648-93-1	Candidate, Suspected endocrine disruptor
exyl phthalate, DHP	84-75-3	Candidate, Suspected endocrine disruptor
sobutyl phthalate (DIBP)	84-69-5	Candidate, Endocrine disrupter
sodecyl phthalate (DIDP)	68515-49-1, 26761-40-0	Suspected endocrine disruptor
sononyl phthalate (DINP)	28553-12-0	Suspected endocrine disruptor
n-octyl phthalate (DNOP)	117-84-0	Suspected endocrine disruptor
entyl phthalate (DPP)	131-18-0	Candidate, Suspected endocrine disruptor

4.3.5 Appendix 5: List of perfumes

List of the 26 fragrances which must be declared in cosmetics by law (Regulation (EC) No 1223/2009 on cosmetic products, Annex III) and must be stated on the packaging. All of these fragrances may cause allergy.

Swedish name	CAS number	Must be declared with the INCI name
Amylkanelalkohol	104-54-1	Amylcinnamyl alcohol
Hexylkanelaldehyd	101-86-0	Hexyl cinnamal
Bensylalkohol	100-51-6	Benzyl alcohol
Bensylbensoat	120-51-4	Benzyl benzoate
Bensylcinnamat	103-41-3	Benzyl cinnamate
Bensylsalicylat	118-58-1	Benzyl salicylate
Citral	5392-40-5	Citral
Kumarin	91-64-5	Coumarin
Anisalkohol	105-13-5	Anise alcohol
Lilial	80-54-6	Butylphenyl methylpropional
Limonen	5989-27-5, 5989-54-8, 138-86-3	Limonene
Linalol	78-70-6	Linalool
Citronellol	106-22-9, 26489-01-0, 7540-51-4, 1117-61-9	Citronellol
Farnesol	4602-84-0	Farnesol
Lyral	31906-04-4	Hydroxyisohexyl 3-cyclohexene carboxaldehyde
Amylkanelaldehyd	122-40-7	Amyl cinnamal
Eugenol	97-53-0	Eugenol
Geraniol	106-24-1	Geraniol
Hydroxicitronellal	107-75-5	Hydroxycitronellal
Isoeugenol	97-54-1	Isoeugenol
Kanelaldehyd	104-55-2	Cinnamal
Kanelalkohol	104-54-1	Cinnamyl alcohol
Metyl 2-oktynat	111-12-6	Methyl-2-Octynate
Trämosseextrakt	90028-67-4	Evernia furfuracea
Alfa-isometyl-jonon	127-51-5	Alpha isomethyl ionone
Ekmosseextrakt	90028-68-5	Evernia prunastri

Notes

Beställ kostnadsfritt fler exemplar av Ufasningslista för miljö- och hälsofarliga kemikalier i kemiska produkter Isf.servicecenter@sll.se

