



## RESTRICTED SUBSTANCES LIST

("RSL") 4.0

APRIL: 2017

### BELGIUM BRANDS:

Fred & Ginger	Limon
Fred & Ginger Sister	Superstar
Hilde & Co	CKS
Kiekeboe	Friday
Ginger	Brantano
Baker Bridge	

### DUTCH BRANDS:

Claudia Sträter  
Expresso Fashion  
Steps  
Miss Etam  
Promiss

**INTRODUCTION**

Dear Supplier,

We would like to remind you that as a supplier to FNG Group you have agreed only to supply products to FNG Group that comply with the European and FNG Group restrictions on the use of harmful substances. FNG Group restrictions are generally based on existing European Legislation, but in certain cases it has been decided to impose stricter limitations on products where there is evidence that a product may present a risk for the customer, although precise legislation has not yet been introduced.

These standards are mandatory and we fully expect and require that all our suppliers comply with these requirements, which form part of our contractual relationship.

We recognize that these requirements can be a source of additional challenge to our supply chain, as indeed they are to FNG Group, but we have to stress that these standards are essential to the future of our business. The consequences of non-compliance will affect us all. It remains a primary aim of FNG Group to ensure that only safe, legally compliant and clean products are offered on sale in stores.

In order to ensure compliance with these standards it is imperative that all your suppliers of components for the manufacture of FNG Group merchandise are made aware of our, and therefore, your requirements.

You are strongly advised to proactively seek assurance, in the form of test reports issued by accredited testing houses, from your suppliers. This not only provides you with guarantees that your suppliers are meeting the standards; it also ensures that you will likely not face problems with your merchandise when one of your styles will be selected for pre-delivery testing.

As matter of general principle, FNG Group reserves the right to select styles to be (counter) tested upon arrival in our warehouse. If this post-test is a "FAIL", all the cost incurred in this testing procedure shall be borne by the supplier, including all additional cost for non-marketable styles.

In order to fulfill your own due diligence duties, we recommend that you install an independent monitoring procedure on the incoming and outgoing products delivered to FNG Group.

An accurate and proven due diligence program will provide security to you in regards to compliance with applicable EU legislation. Please note that deliberate or negligent imports or distribution of goods into the EU containing illegal substances is considered as criminal offence.

We recommend you being proactive in seeking professional advice about how to test your product, how to set up procedures to check that the raw materials you receive do in fact comply with the required standards. A sole written instruction, without a controlling procedure in place has been proven not be sufficient.

A valid OEKO-TEX® Standard 100 product certificate issued by the OEKO-TEX® Association ([www.oeko-tex.com](http://www.oeko-tex.com)) covers most of requirements of this RSL. The new OEKO-TEX® certification, known as Sustainable Textile Production (STeP) (replacement of OEKO-TEX® Standard 1000), has a wider scope: it covers also environmental aspects on the production site. Certification according to Oeko-Tex ® Standard 100 or STeP can be more cost effective than single tests. Input Stream Management of the Bluesign® system ([www.bluesign.com](http://www.bluesign.com)), for unsustainable substances to be eliminated first or meeting the EU Ecolabel ([www.ecolabel.eu](http://www.ecolabel.eu)) requirements is also a cost effective way to fulfil obligations of this RSL.

Whether your textiles or facility has any of the above certifications, kindly inform us.

As a result of a dynamic process this RSL will be updated on a regular basis in order to assist in the development of responsible entrepreneurship and they can be used as a basis for the development of Quality Management Systems.

In case of any question, please contact your FNG contact person Marieke Weemaes or Whitney Vaars of the Sustainability Department.

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- indicate that a chemical has been in widespread use and/or frequently detected in a particular material.
- indicate that a chemical has been deliberately used and/or detected in a particular material occasionally.
- indicates there is a very low but theoretical chance that a chemical could be used and/or detected.
- No dot indicates that we believe there is an almost negligible risk of a chemical being used and/or detected.

CHEMICAL	NATURAL FIBERS	BLENDED FIBERS	SYNTHETIC FIBERS	ARTIFICIAL LEATHER (WITH FIBER BACKING)	NATURAL LEATHER	COATING AND PRINTS	NATURAL MATERIALS	POLYMERS, PLASTICS, FOAMS, NATURAL & SYNTHETIC RUBBER	METAL	FEATHER & DOWN	GLUE
ALKYLPHENOLS AND ALKYPHENOL ETHOXYLATES	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●		●	●●●
AZO DYES	●●●	●●●	●●●	●●●	●●●	●●●	●●●			●●●	
BIOCIDES & PESTICIDES	●	●	●	●	●	●		●			
CHLOROBENZENES AND CHLOROTOLUENES		●●	●●		●						
CHLORINATED PARAFFINS	●	●	●	●	●●●	●●		●●			
CHLOROPHENOLS	●	●		●	●	●				●	
DISPERSE DYES WHICH ARE CLASSIFIED TO BE ALLERGENIC		●●	●●	●●		●●					
DYES WHICH ARE CLASSIFIED TO BE CARCINOGENIC	●●	●●	●●	●●		●●					
DYES WITH ENVIRONMENTAL PROBLEMS		●	●	●		●					
FLAME RETARDENTS	●	●	●	●	●	●	●	●●		●●	
FORMALDEHYDE	●●●	●●●	●●●	●●●	●●●	●●●	●●●				●●●

- indicate that a chemical has been in widespread use and/or frequently detected in a particular material.
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HEAVY METALS EXTRACTABLE AND SOLUBLE	●●	●●	●●	●●	●●	●●		●●				
HEAVY METALS, CHROMIUM VI	●				●●●							
HEAVY METALS TOTAL CONTENT LEAD & CADMIUM				●		●		●	●			
HEAVY METALS, RELEASABLE NICKLE									●●●			
ORGANOTIN COMPOUNDS	●	●	●	●	●	●		●			●	
PERFLUORINATED CHEMICALS PFOS & PFOA	●● (If water- or stain-repellant finish is applied)										●●	
pH	●●	●●	●●	●●	●●							
PHthalates				●●●		●●●		●●●			●●●	
POLYCLIC AROMATIC HYDROCARBONS				●●●		●●●		●●●			●●●	
PVC						●●		●●				
Volatile Organic Compounds (VOCs)	●●	●●	●●	●●	●●	●●		●●			●●	

SUBSTANCE	CAS NUMBER	TEST METHOD	RESTRICTED LIMIT FOR CHILDREN YOUNGER THAN < 3 YEARS OLD	RESTRICTED LIMIT FOR CHILDREN/ADULTS OLDER THAN > 3 YEARS OLD	RELEVANCE OF RESTRICTION
<b>ALKYLPHENOLS (AP) AND ALKYLPHENOL ETHOXYLATES (APEO)</b>					
Nonylphenols (NP)	104-40-5 11066-49-2 25154-52-3 84852-15-3 90481-04-2	Textiles: EN-ISO 18254:2016-1 followed by LC-MS  Leather: EN-ISO 18218-1:2015-1 followed by LC-MS	< 10 mg/kg	< 100 mg/kg	APEOs are widely used in detergents, scouring agents, wetting agents, softeners, leather finishing, de-gumming for silk, Polyester padding and many other uses. APEO's can easily degrade to AP's which are considered to be toxic, persistent to the environment and bioaccumulative.
Octylphenols (OP)	140-66-9 1806-26-4 27193-28-8				
Nonylphenoethoxylates (NPEO)	9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0				
Octylphenoethoxylates (OPEO)	9002-93-1 9036-19-5 68987-90-6				
<b>AZO DYES WHICH BY REDUCTIVE CLEAVAGE MAY RELEASE ONE OR MORE AROMATIC ARYLAMINES</b>					
4-Aminobiphenyl	92-67-1	EUROPE: Textiles (incl. Polyester): EN-ISO 14362-1:2017  Leather: EN-ISO 17234-1:2015  Test Method for confirmation of 4-Aminoazobenzene (4AAB) Textiles (EU): EN-ISO 14362-3: 2017 Leather (EU): EN-ISO 17234-2: 2015	< 20 mg/kg	< 20 mg/kg	AZO Dyes may release one or more arylamines. The listed arylamines are considered to be carcinogenic.
Benzidine	92-87-5				
4-Chloro-o-toluidine	95-69-2				
2-Naphtylamine	91-59-8				
o-Aminoazotoluene	97-56-3				
5-Nitro-o-toluidine	99-55-8				
4-Chloroaniline	106-47-8				
2,4-Diaminoaniline	615-05-4				
4,4'-Diaminodiphenylmethane (4,4'-MDA)	101-77-9				
3,3'-Dichlorobenzidine	91-94-1				
3,3'-Dimethoxybenzidine	119-90-4				
3,3'-Dimethylbenzidine	119-93-7				
4,4'-Methylenedi-o-toluidine	838-88-0				
p-Cresidine	120-71-8				
4,4'-Methylene-bis(2-chloroaniline)	101-14-4				
4,4'-Oxydianiline	101-80-4				
4,4'-Thiodianiline	139-65-1				
o-Toluidine	95-53-4				
2,4-Toluenediamine (2,4-TDA)	95-80-7				
2,4,5-Trimethylaniline	137-17-7				
o-Anisidine (2-Methoxyaniline)	90-04-0				
4-Aminoazobenzene (4-AAB)	60-09-3				
2,4-Xylidine	95-68-1				
2,6-Xylidine	87-62-7				

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<b>BIOCIDES &amp; PESTICIDES</b>					
Dimethylfumarate	624-49-7	ISO 16186: 2012 Extraction, GC-MS	< 0.1 mg/kg		Dimethyl fumarate (DMFu) is a fungicide used to prevent mould in leather and textiles. DMFu can cause acute dermatitis, eczema, and general fatigue to the persons who have been in contact with this substance. Can also be used as Pesticide
o-Phenylphenol (OPP)	90-43-7	ISO 13365: 2011 Extraction, GC-MS	< 50 mg/kg		o-Phenylphenol can be used for its preservative properties in leather or as a carrier in dyeing processes. Can irritate the skin and cause in contact with eye severe irritation and burns with possible eye damage.
Triclosan	3380-34-5		< 1 mg/kg		Triclosan can be used as disinfectant and as antibacterial agent in textiles. Triclosan can damage the liver, kidneys, heart and lungs, suppresses the immune system.
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)	93-76-5	U.S. EPA Method 8081A/ 8151A	< 0.5 mg/kg	< 1mg/kg	A pesticide may be a chemical substance, biological agent (such as a virus or bacteria), antimicrobial, disinfectant or device used against any pest Pesticides also have drawbacks: potential toxicity to humans and animals In textiles and apparel, these pesticides may be found in natural fibres, primarily cotton.
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7				
Acetamiprid	135410-20-7 160430-64-8				
Aldicarb	116-06-3				
Azinophosmethyl	86-50-0				
Azinophosethyl	2642-71-9				
Aldrin	309-00-2				
Bromophos-ethyl	4824-78-6				
Captafol	2425-06-1				
Carbaryl	63-25-2				
Chlordane	57-74-9				
Chlordimeform	6164-98-3				
Chlorfenvinphos	470-90-6				
Clothianidin	210880-92-5				
Coumaphos	56-72-4				
Cyfluthrin	68359-37-5				
Cyhalothrin	91465-08-6				
Cypermethrin	52315-07-8				
1,2,4-Tributylphosphorotrithioate (DEF)	78-48-8				
Deltamethrin	52918-63-5				
Mitotan, 1,1-Dichlor- 2-(2-chlorophenyl)- 2-(4-chlorophenyl)ethane (DDD)	53-19-0 72-54-8				
1-Chlor-4-[2,2-dichlor-1-(4-chlorophenyl)ethenyl]benzene (DDE)	3424-82-6 72-55-9				
1,1,1-Trichlor-2,2-bis-(4-chlorophenyl)ethane (DDT)	50-29-3 789-02-6				
Diazinon	333-41-5				
Dichlorprop	120-36-5				
Dicrotophos	141-66-2				
Dieldrin	60-57-1				



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<b>BIOCIDES &amp; PESTICIDES CONTINUED</b>					
Dimethoat	60-51-5				
Dinoseb, Salts and Acetate	88-85-7 et al				
Dinotefuran	165252-70-0				
Endosulfan, α-	959-98-8				
Endosulfan, β-	33213-65-9				
Endrin	72-20-8				
Esfenvalerat	66230-04-4				
Fenvalerat	51630-58-1				
Heptachlor	76-44-8				
Heptachlorepoxyd	1024-57-3				
Hexachlorbenzol	118-74-1				
Hexachlorcyclohexan, α-	319-84-6				
Hexachlorcyclohexan, δ-	319-85-7				
Hexachlorcyclohexan, δ	319-86-8				
Imidacloprid	105827-78-9,				
Isodrin	465-73-6				
Kelevan	4234-79-1				
Kepon	143-50-0				
Lindan	58-89-9				
Malathion	121-75-5				
2-Methyl-4-chlorophenoxyacetic acid (MCPA)	94-74-6	U.S. EPA Method 8081A/ 8151A	< 0.5 mg/kg	< 1 mg/kg	A pesticide may be a chemical substance, biological agent (such as a virus or bacteria), antimicrobial, disinfectant or device used against any pest Pesticides also have drawbacks: potential toxicity to humans and animals In textiles and apparel, these pesticides may be found in natural fibres, primarily cotton.
(2-Methyl-4-Chlorophenoxy)butyric acid (MCPB)	94-81-5				
Mecoprop	93-65-2				
Metamidophos	10265-92-6				
Methoxychlor	72-43-5				
Mirex	2385-85-5				
Monocrotophos	6923-22-4				
Nitenpyram	150824-47-8				
Parathion	56-38-2				
Parathion-methyl	298-00-0				
Perthan	72-56-0				
Phosdrin/Mevinphos	7786-34-7				
Propethamphos	31218-83-4				
Profenophos	41198-08-7				
Quinalphos	13593-03-8				
Stroban	8001-50-1				
Telodrin	297-78-9				
Thiacloprid	111988-49-9				
Thiamethoxam	153719-23-4				
Toxaphen (Camphechlor)	8001-35-2				
Trifluralin	1582-09-8				



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<b>CHLOROENZENES AND CHLOROTOLUENES</b>					
Hexachlorobenzene (HCB)	118-74-1	DIN 54232:2010 followed by GC-MS	< 1 mg / kg (total).		These carriers are used in dyeing polyester and blends of wool and polyester as wool cannot be dyed at the high temperatures (130°C) required for dyeing polyester. Most of these carriers are toxic to humans and aquatic organisms, and some are even carcinogenic.
Pentachlorobenzenes (PCB)	608-93-5				
Tetrachlorobenzenes:					
1,2,3,4-TeCB	634-66-2				
1,2,3,5-TeCB	634-90-2				
1,2,4,5-TeCB	95-94-3				
Trichlorobenzenes:					
1,2,3-TriCB	87-61-6				
1,2,4-TriCB	120-82-1				
1,3,5-TriCB	108-70-3				
Chlorobenzene	108-90-7				
Dichlorobenzenes:					
1,2-DiCB	95-50-1				
1,3-DiCB	541-73-1				
1-4-DiCB	106-46-7				
Monochlorotoluenes:					
2-CT	95-49-8				
3-CT	108-41-8,				
4-CT	106-43-4				
Dichlorotoluenes:					
2,3-DiCT	32768-54-0				
2,4-DiCT	95-73-8				
2,5-DiCT	19398-61-9				
2,6-DiCT	118-69-4				
3,4-DiCT	95-75-0				
3,5-DiCT	25186-47-4				
Trichlorotoluenes:					
2,3,6-TRI CT	2077-46-5				
2,4,5-TRI CT	6639-30-1				
α,α,α,-TRI CT	98-07-7				
Tetrachlorotoluenes:					
α,α,α,4-TetraCT	5216-25-1				
α,α,α,2-TetraCT	2136-89-2				
2,6,α,α-TetraCT	81-19-6				
Pentachlorotoluenes (PCT)	877-11-2				

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<b>CHLORINATED PARAFFINS</b>					
Short-chain chlorinated paraffins (SCCP)	85535-84-8	EN-ISO 18219:2016	< 1000 mg/kg		SCCP's and MCCP's are used as flame retardants, in plasticizers, paints and adhesives. Also used for fat liquoring of leather. May cause long-term adverse effects in the aquatic environment.
Medium-chain chlorinated paraffins (MCCP)	85535-85-9				
<b>CHLOROPHENOLS</b>					
Pentachlorophenol (PCP)	87-86-5	Extraction with KOH followed by GC-MS*  *In case of results close to limit value (+/- 10 %) re-test with reference method: §64 LFGB BVL B 82.02-8 (2001) (for textiles) or ISO 17070 (2015) (for leather)	< 0.5 mg/kg	< 5 mg/kg	PCP and TeCP's are polychlorinated compounds used to preserve wood, leather, and textiles. PCP and TeCP's are irritants to the skin, eyes and mouth and can cause harmful effects to the liver, kidneys, blood and lungs and are probable human carcinogens
Tetrachlorophenol (TeCP)	58-90-2 935-95-5 4901-59-3				
Trichlorophenols (TriCP)	15950-66-0 933-78-8 933-75-5 95-95-4 88-06-2 609-19-8				
Dichlorophenols (DiCP)	576-24-9 120-83-2 583-78-8 87-65-0 95-77-2 591-35-5				
Monochlorophenols (CP)	95-57-8 108-43-0 106-48-9				

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<b>DISPERSE DYES WHICH ARE CLASSIFIED TO BE ALLERGENIC</b>					
C.I. Disperse Blue 1	2475-45-8	DIN 54231: 2005	< 1 mg/l (= ± 15 mg/kg)	< 5 mg/l (= appr.75 mg/kg)	Disperse dyes are mainly used for dyeing polyester, nylon and cellulose acetate. Some disperse dyes have an allergenous potential to the human skin and are a possible threat to health, especially if the dyes are not colour fast to perspiration. A number of disperse dyes are legally restricted outside the EU. Most of them appear in RSL's of international retailers.
C.I. Disperse Blue 3	2475-46-9				
Disperse Blue 7	3179-90-6				
Disperse Blue 26	3860-63-7				
Disperse Blue 35	56524-76-7 56524-77-7				
Disperse Blue 102	12222-97-8				
Disperse Blue 106	12223-01-7				
Disperse Blue 124	61951-51-7				
Disperse Brown 1	23355-64-8				
Disperse Orange 1	2581-69-3				
Disperse Orange 3	730-40-5				
Disperse Orange 37/59/76	12223-33-5 13301-61-6				
Disperse Orange 149	85136-74-9				
Disperse Red 1	2872-52-8				
Disperse Red 11	2872-48-2				
Disperse Red 17	3179-89-3				
Disperse Yellow 3	2832-40-8				
Disperse Yellow 1	119-15-3				
Disperse Yellow 3	2832-40-8				
Disperse Yellow 9	6373-73-5				
Disperse Yellow 23	6250-23-3				
Disperse Yellow 39	12236-29-2				
Disperse Yellow 49	54824-37-2				
<b>DYES WHICH ARE CLASSIFIED TO BE CARCINOGENIC</b>					
Acid Red 26	3761-53-3	DIN 54231:2005	< 1 mg/l (= ± 15 mg/kg)	< 5 mg/l (= appr.75 mg/kg)	According to the Commission Decision these dyestuffs are not allowed in products bearing the EU Eco-label because they are considered to be carcinogenic.
Basic Red 9	569-61-9				
Basic Violet 14	632-99-5				
Direct Black 38	1937-37-7				
Direct Blue 6	2602-46-2				
Direct Red 28	573-58-0				
Disperse Blue 1	2475-45-8				
Disperse Orange 11	82-28-0				
Disperse Yellow 3	2832-40-8				
Disperse Navy Blue					
Component 1:	118685-33-9				
Component 2:					
Basic Violet 3	548-62-9				
C.I. Basic Blue 26	2580-56-5				
C.I. Basic Green 4 (oxalate, chloride or free)	2437-29-8 569-64-2 10309-95-2				
				< 250 mg/kg	

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<b>FLAME RETARDENTS</b>					
Heptabromodiphenyl ether	446255-22-7 207122-16-5	Solvent extraction followed by GC-MS or LC-MS	Do not use Detection limit: 10 mg/kg		These types of flame retardents are toxic and are suspected to be carcinogenic. They persist in the environment and food chain, and are likely to pass up the food chain.
Hexabromodiphenyl ether	68631-49-2 207122-15-4				
Tetrabromodiphenyl ether	5436-43-1				
Tetrabromobisphenol A (TBBPA)	79-94-7				
Pentabromodiphenyl ether (PentaBDE)	32534-81-9 60348-60-9				
Polybromobiphenyls (PBB)	59536-65-1				
Tris-(2,3-dibromopropyl)- phosphate (TRIS)	126-72-7				
Tris - (aziridiny) - phosphineoxide (TEPA)	545-55-1				
Bis(2,3-dibromopropylether) BDBPT	21850-44-2				
Octabromodiphenylether (OctaBDE)	32536-52-0				
Hexabromocyclododecane (HBCDD)	25637-99-4 3194-55-6				
Tris-(2-chloroethyl)-phosphate (TCEP)	115-96-8				
Decabromodiphenyl Ether (DecaBDE)	1163-19-5				
Bis(2,3-dibromopropyl) phosphate (BBP)	5412-25-9				
Tris(1,3-dichloro-2- propyl) phosphate (TDCP)	13674-87 -8				
2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0				
Triphenyl phosphate (TPP)	115-86-6	Acid digestion followed by ICP analysis			
Tricresyl phosphate (all 10 isomers)	1330-78-5				
Boric Acid	10043-35-3 11113-50-1	Extraction with toluene, 2h, 100°C followed by GC-MS	< 0.1 % (< 1000 mg/kg)		

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<b>FORMALDEHYDE</b>					
Formaldehyde	50-00-0	Textile, Wood, Paper: EN- ISO 14184-01:2014 Leather/other: EN- ISO 17226-01:2008	< 16 mg/kg	< 75 mg/kg	Formaldehyde: used in anti-creasing, anti-shrinking, easy-ironing and water repellence finishing. Formaldehyde is a toxic chemical which can induce irritation to eyes and nose and even cause cancer.
<b>HEAVY METALS, EXTRACTABLE (APPLICABLE FOR TEXTILES AND TRIMS)</b>					
Arsenic (As)	7440-38-2	Extractable Content: Extraction with acid perspiration according to EN ISO 105-E04:2013 *) no requirements for accessories made from metallic materials	< 0.2 mg/kg	< 1 mg/kg	Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer
Chromium (Cr)	7440-47-3		< 1 mg/kg	< 2 mg/kg	
Cobalt (Co)	7440-48-4		< 1 mg/kg	< 4 mg/kg	
Copper (Cu)*	7440-50-8		< 25 mg/kg	< 50 mg/kg	
Lead (Pb)	7439-92-1		< 0.2 mg/kg	< 1 mg/kg	
Nickel (Ni)	7440-02--0		< 0.5 mg/kg	< 1 mg/kg	
Antimony (Sb)	7440-36-0		< 30 mg/kg		
Cadmium (Cd)	7440-43-9		< 0.1 mg/kg		
Mercury (Hg)	7439-97-6		< 0.02 mg/kg		
<b>APPLICABLE FOR LEATHER ITEMS</b>					
Chromium VI (Cr VI)	18540-29-9	EN-ISO 17075: 2017 after aging, aging conditions: 24 H/ 80 degrees C./ 5% r.H., closed static drying oven, no fresh air supply, no ventilator	< 3 mg/kg		Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer

SUBSTANCE	CAS NUMBER	TEST METHOD	RESTRICTED LIMIT FOR CHILDREN YOUNGER THAN < 3 YEARS OLD	RESTRICTED LIMIT FOR CHILDREN/ADULTS OLDER THAN > 3 YEARS OLD	RELEVANCE OF RESTRICTION
<b>HEAVY METALS, SOLUBLE (APPLICABLE FOR GARMENT COMPONENTS)*</b>					
Antimony	7440-36-0	Extraction with simulated gastric solution acc. to EN 71-3:1995  *) Such as: Press studs, Eyelets, Velcro, Zippers, Wires, Decorative Labels, Hook and Eye, Plastic sleeving, Sequins, Beads, Pearls, Diamantes, Buttons	< 60 mg/kg	Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer	
Arsenic	7440-38-2		< 25 mg/kg		
Barium	7440-39-3		< 1000 mg/kg		
Cadmium	7440-43-9		< 75 mg/kg		
Chromium	7440-47-3		< 60 mg/kg		
Lead	7439-92-1		< 90 mg/kg		
Mercury	7439-97-6		< 60 mg/kg		
Selenium	7782-49-2		< 500 mg/kg		
<b>HEAVY METALS, TOTAL CONTENT</b>					
Cadmium and its compounds	7440-43-9	EN 1122: 2001  For metal parts: digestion with aqua regia, determination using ICP.	for all polymer materials: (e.g. beads, pearls, diamonties (incl. jewellery): < 10 mg/kg  For metal parts: < 100 mg/kg	Many heavy metals are bio accumulative when absorbed by the human body through perspiration and give cause for concern in health terms such as chronic toxicity, allergenic reactions and cancer	
Lead and its compounds	7439-92-1	Total Digestion (industry practice - not specified by the regulation)  For metal parts digestion with aqua regia, determination using ICP.	Textiles, leather, plastic, metal, packaging, jewellery : < 90 mg/kg		
Cobalt dichloride (only for desiccants)	7646-79-9	Microwave digestion followed by ICP/MS calculated from the cobalt content	Do not use: < 1 mg/kg		
<b>HEAVY METALS, RELEASABLE NICKEL</b>					
Nickel	7440-02-0	Nickel release: EN 1811:2015  Abrasion of coated items: EN 12472:2006	In metal products or parts of products intended to be used for body piercings: ≤ 0.2 µg nickel per cm <sup>2</sup> per week	Nickel can cause extreme allergies.	
		Nickel indication: Rubbing test by CR 12471: 2002	Consumer goods such as jewellery, snap fasteners, press buttons, zip fasteners, etc., which can come into contact with the human skin for a longer period must not release more than ≤ 0.5 µg nickel per cm <sup>2</sup> per week		
		EN-ISO 16128: 2015	In spectacle frames and sunglasses intended to come into close and prolonged contact with the skin: ≤ 0.5 µg nickel per cm <sup>2</sup> per week		

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<b>ORGANOTIN COMPOUNDS</b>					
Monobutyltin (MBT)	78763-54-9	ISO/TS 16179: 2012	< 0.5 mg/kg each	< 1.0 mg/kg each	Organotin compounds are used as biocides (antibacterials), and/or heat stabilizers in plastics, inks, paints, and heat transfer material. It is also used to prevent unpleasant odours. Damage to liver, kidneys, blood forming processes and disruption of the enzyme system are possible, particularly to children.
Monooctyltin (MOT)	3091-25-6				
Monomethyltin (MMT)	23001-26-5				
Monophenyltin (MPHT)	2406-68-0				
Diphenyltin (DPHT)	1011-95-6				
Dibutyltin (DBT)	14488-53-0				
Diocyltin (DOT)	15231-44-4 3542-36-7				
Dimethyltin (DMT)	753-73-1				
Tributyltin (TBT)	56573-85-4				
Triphenyltin (TPHT)	668-34-8				
Tricyclohexyltin (TCyHT)	3091-32-5				
Triocyltin (TOT)	2587-76-0				
Tripopyl tin (TPT)	2279-76-7				
Trimethyltin (TMT)	1066-45-1				
Tetrabutyltin (TebT)	1461-25-2				
<b>PERFLUORINATED CHEMICALS AND HER COMPOUNDS</b>					
Perfluorooctanesulfonates (PFOS)	2795-39-3 1763-23-1	CEN/TS 15968: 2010	Do not use: < 1µg / m <sup>2</sup>		PFOS can be used as impregnation agents and cleaning products. PFOS is persistent, bioaccumulative, poisonous and possibly carcinogenic. PFOA is mainly used as a surfactant and have the same risk profile as PFOS.
Perfluorooctane acids (PFOA)	335-67-1 3825-26-1 335-95-5 2395-00-8 335-66-0 376-27-2 3108-24-5				

SUBSTANCE	CAS NUMBER	TEST METHOD	RESTRICTED LIMIT FOR CHILDREN YOUNGER THAN < 3 YEARS OLD	RESTRICTED LIMIT FOR CHILDREN/ADULTS OLDER THAN > 3 YEARS OLD	RELEVANCE OF RESTRICTION
<b>PHthalATES</b>					
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	EN-ISO 14389: 2014	The sum of all Phthalates < 1000 mg/kg		Phthalates are added to plastics to increase flexibility. In textiles and apparel, phthalates can be found in coated textiles, plastic components, trims and plastisol prints. Phthalates are reprotoxic and can cause birth defects and changes in hormone levels. A complete ban of Phthalates is recommended by NGO's and many retailers.
Dibutyl phthalate (DBP)	84-74-2				
Butylbenzyl phthalate (BBP)	85-68-7				
Di-"isononyl" phthalate (DINP)	28553-12-0 68515-48-0				
Di-"isodecyl phthalate (DIDP)	26761-40-0 68515-49-1				
Di-n-octyl phthalate (DNOP)	117-84-0				
Di-isobutyl phthalate (DIBP)	84-69-5				
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0				
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6				
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4				
N-pentyl-isopentyl phthalate (NPIPP)	776297- 69-9				
Diisopentylphthalate (DIPP)	605-50-5				
Dipentyl phthalate (DPP)	131-18-0				
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8				
1,2- Benzenedicarboxylic acid. Dihexyl ester. Branched and linear (DHxP)	68515-50-4				
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate	68515-51-5 68648-93-1				
Di-iso-hexylphthalate (DIHxP)	71850-09-4				
Dinonylphthalate (DNP)	84-76-4				
Di-iso-octylphthalate (DIOP)	27554-26-3				
Di-n-propylphthalate (DPRP)	131-16-8				
Di-cyclohexylphthalate (DCHP)	84-61-7				
Diethyl phthalate (DEP)	84-66-2				
Dimethyl phthalate (DMP)	131-11-3				
Di-n-hexyl phthalate (DHP)	84-75-3				



SUBSTANCE	CAS NUMBER	TEST METHOD	RESTRICTED LIMIT FOR CHILDREN YOUNGER THAN < 3 YEARS OLD	RESTRICTED LIMIT FOR CHILDREN/ADULTS OLDER THAN > 3 YEARS OLD	RELEVANCE OF RESTRICTION
<b>POLYCYCLIC AROMATIC HYDROCARBONS (PAH'S)</b>					
Benzo(a)pyrene	50-32-8	AfPS GS 2014:01 PAH	≤ 0.5 mg/kg each for toys and childcare articles	≤ 1.0 mg/kg each PAH	Rubber or plastic components that come into direct and prolonged contact with the human skin or the oral cavity can cause severe allergic reactions.
Benzo(a)anthracene	56-55-3				
Chrysene	218-01-9				
Benzo(b)fluoroanthene	205-99-2				
Benzo(k)fluoroanthene	207-08-9				
Dibenzo(a,h)anthracene	53-70-3				
Benzo(e)pyrene	192-97-2		The sum of 10 PAH's ≤ 10 mg/kg		
Benzo(j)fluoroanthene	205-82-3				
Acenaphthene	83-32-9				
Acenaphthylene	208-96-8				
Antracene	120-12-7				
Benzo(ghi)perylene	191-24-2				
Fluoranthene	206-44-0				
Fluorene	86-73-7				
Indeno(1,2,3-cd)pyrene	193-39-5				
Naphthalene	91-20-3				
Phenanthrene	85-01-8				
Pyrene	129-00-0				

SUBSTANCE	CAS NUMBER	TEST METHOD	RESTRICTED LIMIT FOR CHILDREN YOUNGER THAN < 3 YEARS OLD	RESTRICTED LIMIT FOR CHILDREN/ADULTS OLDER THAN > 3 YEARS OLD	RELEVANCE OF RESTRICTION
<b>PVC</b>					
Polyvinylchloride	9002-86-2	Beilstein test/Infrared Spectroscopy (FTIR)		Do not use	The use of PVC is voluntarily restricted because it is claimed that dioxins are produced as a byproduct of vinyl chloride manufacture and from burning of waste PVC
<b>SOLVENTS HALOGENATED - VOLATILE ORGANIC COMPOUNDS</b>					
Hexachlorobutadiene	87-68-3	Head space GC-MS		< 1mg/kg	<p>Halogenated solvents are a general class of chemicals that have a variety of different properties and therefore end uses. Some of the more common uses include chemical intermediate (including dyes and pesticides), industrial cleaning (processing equipment, boilers, etc), spot cleaning, textile processing (scouring solvent, carrier solvent for preparations and functional finishes), urethane foam blowing agents and can be used as in the manufacture of plastics and PVC</p>
Tetrachloroethylene	127-18-4			< 20 mg/kg	
Trichloroethylene	79-01-6			< 50 mg/kg	
Pentachloroethane	76-01-7			< 1000 mg/kg	
1,1,2,2-Tetrachlorethan	79-34-5				
1,1,1,2-Tetrachloroethane	630-20-6				
Carbon Tetra Chloride	56-23-5				
1,1,1-Trichloroethane	71-55-6				
Chloroform	67-66-3				
Trichloroethane	79-00-5				
1,1-Dichloroethylene	75-35-4				
1,2,3-Trichloropropane	96-18-4				
1,2-Dichloroethane	107-06-2				

SUBSTANCE	CAS NUMBER	TEST METHOD	RESTRICTED LIMIT FOR CHILDREN YOUNGER THAN < 3 YEARS OLD	RESTRICTED LIMIT FOR CHILDREN/ADULTS OLDER THAN > 3 YEARS OLD	RELEVANCE OF RESTRICTION
<b>SOLVENTS OTHER - VOLATILE ORGANIC COMPOUNDS</b>					
Benzene	71-43-2	Head space GC-MS	< 1 mg/kg		
Toluene	108-88-3		< 5 mg/kg		
Styrene	100-42-5		< 10 mg/kg		
Naphthalene	91-20-3				
Ethylbenzene	100-41-4				
Xylene	1330-20-7				
Orthoxylene	95-47-6				
Metaxylene	108-38-3		< 20 mg/kg		
Paraxylene	106-42-3				
Acetophenone	98-86-2				
2-Phenyl-2-propanole	617-94-7				
Cyclohexanone	108-94-1		< 100 mg/kg		
MEK (Methyl-Ethyl-Ketone)	78-93-3				
DMFa (N,N Dimethylformamide)	68-12-2		< 300 mg/kg		
1-Methyl-2pyrrolidone	872-50-4				
2-Ethoxyethylacetate	111-15-9				
DMAC (N,N-dimethylacetamide)	127-19-5		< 1000 mg/kg		
Bis-(2-methoxyethyl) ether	111-96-6				
Formamide	75-12-7				
<b>OTHER ATTENTION POINTS</b>					
pH value for textiles		EN-ISO 3071:2005	4.0 – 7.5	Skin contact: 4.0 – 7.5 No skin contact: 4.0- 9.0	pH is a measure of the acidity or basicity of a solution. A solution with pH is 7 is neutral. pH values that do not fall within the specified limits can cause skin irritation
Odour		SNV 195651:1968	No abnormal odour allowed. If odour rating > 3, VOC test to be performed		

**REACH ANNEX: ECHA'S CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN LAST UPDATE 12-01-2017**
**NUMBER OF SUBSTANCES ON THE CANDIDATE LIST: 173**

Any producer or importer, inside or outside the European Union, shall submit a written notification to FNG Group if a Substance of Very High Concern (SVHC) mentioned on the Candidate List is a part of the article (or packaging material) delivered to FNG Group and meets the following condition:

**A substance of the candidate list is present in the imported/produced article with over 0.1% w/w (>1000 mg/kg).  
 (European Court of Justice judgement of 10-09-2015 case C-106/14 referring to every constituent part of the article)**

[Candidate List of Substances of Very High Concern for authorisation](#)

The identification of a substance as Substance of Very High Concern (SVHC) and its inclusion in the Candidate List is the first step of the authorisation procedure.

Companies may have immediate legal obligations following such inclusion which are linked to the listed substance on its own, in preparations and articles.

Further documentation or more detailed information on the identification process of Substances of Very High Concern can be found on the web pages of ECHA's Member State Committee.

Nr.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
1	4,4'-isopropylidenediphenol Bisphenol A; BPA	80-05-7	2017/01/12	Toxic for reproduction (Article 57 c)
2	4-heptylphenol, branched and linear substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof	-	2017/01/12	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
3	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3830-45-3 3108-42-7 335-76-2	2017/01/12	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
4	p-(1,1-dimethylpropyl)phenol	80-46-6	2017/01/12	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
5	Benzo(def)chrysene	50-32-8	2016/20/06	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); PBT (Article 57 d); vPvB (Article 57 e)
6	1,3-propanesultone	1120-71-4	2015/12/15	Carcinogenic (Article 57a);
7	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	2015/12/15	vPvB (Article 57 e)
8	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	2015/12/15	vPvB (Article 57 e)
9	Nitrobenzene	98-95-3	2015/12/15	Toxic for reproduction (Article 57c)
10	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	2015/12/15	Toxic for reproduction (Article 57c); PBT (Article 57 d)
11	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1	2015/06/15	Toxic for reproduction (Article 57 c)
12	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	2015/06/15	vPvB (Article 57e)
13	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	2014/12/17; 2008/10/28	Equivalent level of concern having probable serious effects to the environment (Article 57 f); Toxic for reproduction (article 57c)
14	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	2014/12/17	Toxic for reproduction (Article 57 c)

Nr.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
15	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)
16	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	2014/12/17	Toxic for reproduction (Article 57 c)
17	Cadmium fluoride	7790-79-6	2014/12/17	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
18	Cadmium sulphate	10124-36-4 31119-53-6	2014/12/17	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
19	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	2014/12/17	PBT (Article 57 d); vPvB (Article 57 e)
20	Cadmium chloride	10108-64-2	2014/06/16	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
21	Sodium peroxometaborate	.7632-04-4	2014/06/16	Toxic for reproduction (Article 57 c)
22	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	2014/06/16	Toxic for reproduction (Article 57 c)
23	Sodium perborate; perboric acid, sodium salt	-	2014/06/16	Toxic for reproduction (Article 57 c)
24	Trixylyl phosphate	25155-23-1	2013/12/16	Toxic for reproduction (Article 57 c);
25	Lead di(acetate)	301-04-2	2013/12/16	Toxic for reproduction (Article 57 c);
26	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	2013/12/16	Toxic for reproduction (Article 57 c);
27	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	2013/12/16	Carcinogenic (Article 57a);
28	Cadmium sulphide	1306-23-6	2013/12/16	Carcinogenic (Article 57a);
29	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	2013/12/16	Carcinogenic (Article 57a);
30	Dihexyl phthalate	84-75-3	2013/12/16	Toxic for reproduction (Article 57 c);
31	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	2013/06/20	Toxic for reproduction (Article 57 c);
32	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	2013/06/20	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
33	Pentadecafluorooctanoic acid (PFOA)	335-67-1	2013/06/20	Toxic for reproduction (Article 57 c);
34	Dipentyl phthalate (DPP)	131-18-0	2013/06/20	Toxic for reproduction (Article 57 c);
35	Cadmium	7440-43-9	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
36	Cadmium oxide	1306-19-0	2013/06/20	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)
37	4,4'-methylenedi-o-toluidine	838-88-0	2012/12/19	Carcinogenic (Article 57a)
38	N-pentyl-isopentylphthalate	776297-69-9	2012/12/19	Toxic for reproduction (Article 57 c)
39	4-Aminoazobenzene	60-09-3	2012/12/19	Carcinogenic (Article 57a)
40	Orange lead (lead tetroxide)	1314-41-6	2012/12/19	Toxic for reproduction (Article 57 c)
41	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	2012/12/19	Toxic for reproduction (Article 57 c)
42	Dimethyl sulphate	77-78-1	2012/12/19	Carcinogenic (Article 57a)
43	Heptacosafuorotetradecanoic acid	376-06-7	2012/12/19	vPvB (Article 57 e)
44	Lead titanium zirconium oxide	12626-81-2	2012/12/19	Toxic for reproduction (Article 57 c)

Nr.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
45	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	2012/12/19	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
46	6-methoxy-m-toluidine (p-cresidine)	120-71-8	2012/12/19	Carcinogenic (Article 57a)
47	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	2012/12/19	Toxic for reproduction (Article 57 c)
48	1,2-Diethoxyethane	629-14-1	2012/12/19	Toxic for reproduction (Article 57 c)
49	Sulfurous acid, lead salt, dibasic	62229-08-7	2012/12/19	Toxic for reproduction (Article 57 c)
50	1-bromopropane (n-propyl bromide)	106-94-5	2012/12/19	Toxic for reproduction (Article 57 c)
51	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	2012/12/19	PBT (Article 57 d); vPvB (Article 57 e)
52	Biphenyl-4-ylamine	92-67-1	2012/12/19	Carcinogenic (Article 57a)
53	Pentalead tetraoxide sulphate	12065-90-6	2012/12/19	Toxic for reproduction (Article 57 c)
54	Silicic acid, lead salt	11120-22-2	2012/12/19	Toxic for reproduction (Article 57 c)
55	o-Toluidine	95-53-4	2012/12/19	Carcinogenic (Article 57a)
56	Acetic acid, lead salt, basic	51404-69-4	2012/12/19	Toxic for reproduction (Article 57 c)
57	Dioxobis(stearato)trilead	12578-12-0	2012/12/19	Toxic for reproduction (Article 57 c)
58	Lead bis(tetrafluoroborate)	13814-96-5	2012/12/19	Toxic for reproduction (Article 57 c)
59	Lead dinitrate	10099-74-8	2012/12/19	Toxic for reproduction (Article 57 c)
60	Silicic acid (H <sub>2</sub> SiO <sub>5</sub> ), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	68784-75-8	2012/12/19	Toxic for reproduction (Article 57 c)
61	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7, 13149-00-3, 14166-21-3	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
62	N-methylacetamide	79-16-3	2012/12/19	Toxic for reproduction (Article 57 c)
63	Pyrochlore, antimony lead yellow	8012-00-8	2012/12/19	Toxic for reproduction (Article 57 c)
64	Lead monoxide (lead oxide)	1317-36-8	2012/12/19	Toxic for reproduction (Article 57 c)
65	Tetralead trioxide sulphate	12202-17-4	2012/12/19	Toxic for reproduction (Article 57 c)
66	Trilead bis(carbonate)dihydroxide	1319-46-6	2012/12/19	Toxic for reproduction (Article 57 c)
67	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
68	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	2012/12/19	Toxic for reproduction (Article 57 c)
69	N,N-dimethylformamide	68-12-2	2012/12/19	Toxic for reproduction (Article 57 c)
70	Tetraethyllead	78-00-2	2012/12/19	Toxic for reproduction (Article 57 c)
71	Methyloxirane (Propylene oxide)	75-56-9	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
72	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	2012/12/19	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
73	Fatty acids, C16-18, lead salts	91031-62-8	2012/12/19	Toxic for reproduction (Article 57 c)
74	Trilead dioxide phosphonate	12141-20-7	2012/12/19	Toxic for reproduction (Article 57 c)
75	o-aminoazotoluene	97-56-3	2012/12/19	Carcinogenic (Article 57a)
76	[Phthalato(2-)]dioxotrilead	69011-06-9	2012/12/19	Toxic for reproduction (Article 57 c)
77	Tricosafuorododecanoic acid	307-55-1	2012/12/19	vPvB (Article 57 e)
78	Lead oxide sulfate	12036-76-9	2012/12/19	Toxic for reproduction (Article 57 c)
79	Methoxyacetic acid	625-45-6	2012/12/19	Toxic for reproduction (Article 57 c)
80	Diisopentylphthalate	605-50-5	2012/12/19	Toxic for reproduction (Article 57 c)
81	Lead cyanamidate	20837-86-9	2012/12/19	Toxic for reproduction (Article 57 c)

Nr.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
82	4,4'-oxydianiline and its salts	101-80-4	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
83	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	2012/12/19	Carcinogenic (Article 57a)
84	Henicosaflluoroundecanoic acid	2058-94-8	2012/12/19	vPvB (Article 57 e)
85	Furan	110-00-9	2012/12/19	Carcinogenic (Article 57a)
86	Pentacosaflluorotridecanoic acid	72629-94-8	2012/12/19	vPvB (Article 57 e)
87	Diethyl sulphate	64-67-5	2012/12/19	Carcinogenic (Article 57a); Mutagenic (Article 57b)
88	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	2012/12/19	Equivalent level of concern having probable serious effects to human health (Article 57 f)
89	Dibutyltin dichloride (DBTC)	683-18-1	2012/12/19	Toxic for reproduction (Article 57 c)
90	Lead titanium trioxide	12060-00-3	2012/12/19	Toxic for reproduction (Article 57 c)
91	Formamide	75-12-7	2012/06/18	Toxic for reproduction (Article 57 c)
92	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	2580-56-5	2012/06/18	Carcinogenic (Article 57a)
93	Diboron trioxide	1303-86-2	2012/06/18	Toxic for reproduction (Article 57 c)
94	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	2012/06/18	Carcinogenic (Article 57a)
95	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	2012/06/18	Toxic for reproduction (Article 57 c)
96	Lead(II) bis(methanesulfonate)	17570-76-2	2012/06/18	Toxic for reproduction (Article 57 c)
97	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	6786-83-0	2012/06/18	Carcinogenic (Article 57a)
98	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	2012/06/18	Mutagenic (Article 57b)
99	4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	548-62-9	2012/06/18	Carcinogenic (Article 57a)
100	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	561-41-1	2012/06/18	Carcinogenic (Article 57a)
101	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	2012/06/18	Carcinogenic (Article 57a)
102	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	2012/06/18	Mutagenic (Article 57b)
103	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	2012/06/18	Toxic for reproduction (Article 57 c)
104	Lead styphnate	15245-44-0	2011/12/19	Toxic for reproduction (article 57 c)
105	Calcium arsenate	7778-44-1	2011/12/19	Carcinogenic (article 57 a)
106	Bis(2-methoxyethyl) ether	111-96-6	2011/12/19	Toxic for reproduction (article 57 c)
107	Phenolphthalein	77-09-8	2011/12/19	Carcinogenic (article 57 a)
108	Arsenic acid	7778-39-4	2011/12/19	Carcinogenic (article 57 a)
109	2-Methoxyaniline; o-Anisidine	90-04-0	2011/12/19	Carcinogenic (article 57 a)
110	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	2011/12/19	Carcinogenic (article 57 a)

Nr.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
111	Bis(2-methoxyethyl) phthalate	117-82-8	2011/12/19	Toxic for reproduction (article 57 c)
112	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	2011/12/19	Equivalent level of concern having probable serious effects to the environment (article 57 f)
113	Dichromium tris(chromate)	24613-89-6	2011/12/19	Carcinogenic (article 57 a)
114	Pentazinc chromate octahydroxide	49663-84-5	2011/12/19	Carcinogenic (article 57 a)
115	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight	-	2011/12/19	Carcinogenic (article 57 a)
116	Lead dipicrate	6477-64-1	2011/12/19	Toxic for reproduction (article 57 c)
117	N,N-dimethylacetamide	127-19-5	2011/12/19	Toxic for reproduction (article 57 c)
118	1,2-dichloroethane	107-06-2	2011/12/19	Carcinogenic (article 57 a)
119	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	2011/12/19	Carcinogenic (article 57 a)
120	Trilead diarsenate	3687-31-8	2011/12/19	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
121	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	2011/12/19	Carcinogenic (article 57 a)
122	Lead diazide, Lead azide	13424-46-9	2011/12/19	Toxic for reproduction (article 57 c),
123	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight		2011/12/19	Carcinogenic (article 57 a)
124	Cobalt dichloride	7646-79-9	2011/06/20 - 2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
125	1-Methyl-2-pyrrolidone	872-50-4	2011/06/20	Toxic for reproduction (article 57c)
126	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	2011/06/20	Toxic for reproduction (article 57c)
127	Hydrazine	302-01-2, 7803-57-8	2011/06/20	Carcinogenic (article 57a)
128	1,2,3-Trichloropropane	96-18-4	2011/06/20	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
129	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	2011/06/20	Toxic for reproduction (article 57c)
130	Strontium chromate	7789-06-2	2011/06/20	Carcinogenic (article 57a)
131	2-Ethoxyethyl acetate	111-15-9	2011/06/20	Toxic for reproduction (article 57c)
132	2-Ethoxyethanol	110-80-5	2010/12/15	Toxic for reproduction (article 57c)
133	Cobalt(II) diacetate	71-48-7	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
134	Cobalt(II) carbonate	513-79-1	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
135	Cobalt(II) sulphate	10124-43-3	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
136	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	7738-94-5, 13530-68-2	2010/12/15	Carcinogenic (article 57a)
137	Cobalt(II) dinitrate	10141-05-6	2010/12/15	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
138	Chromium trioxide	1333-82-0	2010/12/15	Carcinogenic and mutagenic (articles 57 a and 57 b)
139	2-Methoxyethanol	109-86-4	2010/12/15	Toxic for reproduction (article 57c)



Nr.	Substance Name	Cas Number	Date of inclusion	Reason for inclusion
140	Trichloroethylene	79-01-6	2010/06/18	Carcinogenic (article 57 a)
141	Sodium chromate	7775-11-3	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
142	Boric acid	10043-35-3, 11113-50-1	2010/06/18	Toxic for reproduction (article 57 c)
143	Potassium chromate	7789-00-6	2010/06/18	Carcinogenic and mutagenic (articles 57 a and 57 b).
144	Tetraboron disodium heptaoxide, hydrate	12267-73-1	2010/06/18	Toxic for reproduction (article 57 c)
145	Potassium dichromate	7778-50-9	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
146	Disodium tetraborate, anhydrous	1303-96-4, 1330-43-4, 12179-04-3	2010/06/18	Toxic for reproduction (article 57 c)
147	Ammonium dichromate	7789-09-5	2010/06/18	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)
148	Acrylamide	79-06-1	2010/03/30	Carcinogenic and mutagenic (articles 57 a and 57 b)
149	2,4-Dinitrotoluene	121-14-2	2010/01/13	Carcinogenic (article 57a)
150	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
151	Anthracene oil, anthracene-low	90640-82-7	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)
152	Pitch, coal tar, high temp.	65996-93-2	2010/01/13	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
153	Anthracene oil, anthracene paste	90640-81-6	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)
154	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
155	Lead chromate	7758-97-6	2010/01/13	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
156	Anthracene oil	90640-80-5	2010/01/13	Carcinogenic <sup>1</sup> , PBT and vPvB (articles 57a, 57d and 57e)
157	Diisobutyl phthalate	84-69-5	2010/01/13	Toxic for reproduction (article 57c)
158	Tris(2-chloroethyl)phosphate	115-96-8	2010/01/13	Toxic for reproduction (article 57c)
159	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)
160	Anthracene oil, anthracene paste, distn. lights	91995-17-4	2010/01/13	Carcinogenic <sup>2</sup> , mutagenic <sup>3</sup> , PBT and vPvB (articles 57a, 57b, 57d and 57e)
161	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	2008/10/28	Carcinogenic (article 57a)
162	Triethyl arsenate	15606-95-8	2008/10/28	Carcinogenic (article 57a)
163	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	2008/10/28	vPvB (article 57e)
164	Benzyl butyl phthalate (BBP)	85-68-7	2008/10/28	Toxic for reproduction (article 57c)
165	Sodium dichromate	7789-12-0, 10588-01-9	2008/10/28	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
166	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	2008/10/28	PBT and vPvB (articles 57 d and 57 e)
167	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	2008/10/28	PBT (article 57d)
168	Anthracene	120-12-7	2008/10/28	PBT (article 57d)
169	Dibutyl phthalate (DBP)	84-74-2	2008/10/28	Toxic for reproduction (article 57c)
170	Lead hydrogen arsenate	7784-40-9	2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
171	Diarsenic trioxide	1327-53-3	2008/10/28	Carcinogenic (article 57a)
172	Diarsenic pentaoxide	1303-28-2	2008/10/28	Carcinogenic (article 57a)
173	Bis(tributyltin)oxide (TBTO)	56-35-9	2008/10/28	PBT (article 57d)