



The latest REACH SVHC list

As of November 8, 2024

In accordance with REACH regulations, if the SVHC content of an article is greater than 0.1% (w/w), the article supplier shall provide sufficient information to the recipient of the article or the consumer for the safe use of the article; If the SVHC content of the article is greater than 0.1% (w/w) and the annual export volume of the substance is greater than 1 ton, the article supplier shall submit a notification to ECHA. According to the Waste Framework Directive WFD, from 5 January 2021, if the SVHC content in an article is greater than 0.1% (w/w), the article supplier should submit a SCIP notification.

Batch	No.	Substance name	EC No.	CAS No.	SVHC property	Potential uses
The 32nd batch	242	Triphenyl phosphate	204-112-2	115-86-6	Endocrine disrupting properties (Article 57(f) - environment)	Flame retardants and plasticizers
The 31st batch	241	Bis(α,α -dimethylbenzyl) peroxide	201-279-3	80-43-3	Toxic for reproduction (Article 57c)	Vulcanizing agent and crosslinking agent for natural rubber, synthetic rubber and polyethylene resin.
The 30th batch	240	2,4,6-tri-tert-butylphenol	211-989-5	732-26-3	Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e)	Used as an intermediate/reactant in chemical production; in formulations and mixtures for fuel processing in refineries and fuel facilities.
	239	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol	221-573-5	3147-75-9	vPvB (Article 57e)	UV absorber, which is widely used in various plastics, coatings, adhesives, and sealants.





	238	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	438-340-0	119344-86-4	Toxic for reproduction (Article 57c)	Photoinitiators, which is used in ink and toner, printing and recording media reproduction.
	237	Bumetrizole (UV326)	223-445-4	3896-11-5	vPvB (Article 57e)	UV absorber, which is widely used in various plastics, coatings, adhesives, and sealants.
	236	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	700-960-7	-	vPvB (Article 57e)	Used in adhesives and sealants, paints, fillers, putty, stucco, model clays, inks, toners and polymers.
The 29th batch	235	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	278-355-8	75980-60-8	Toxic for reproduction (Article 57c)	Inks and toners, coating products, photo-chemicals, polymers, adhesives and sealants and fillers, putties, plasters, modelling clay.
	234	Bis(4-chlorophenyl) sulphone	201-247-9	80-07-9	vPvB (Article 57 e)	Manufacture of chemicals, plastic products and rubber products.
The 28th batch	233	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	253-692-3	37853-59-1	vPvB (Article 57e)	As an additive flame retardant for plastics, textiles, construction adhesives, etc.; also as a heat stabilizer for electronic appliances.
	232	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	201-236-9	79-94-7	Carcinogenic (Article 57a)	Flame retardant, commonly used in epoxy-coated circuit boards, paper and textiles.





	231	4,4'-sulphonyldiphenol	201-250-5	80-09-1	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - environment); Endocrine disrupting properties (Article 57(f) - human health)	For the production of PESU and other plastics, thermal paper, leather tanning agent.
	230	Barium diboron tetraoxide	237-222-4	13701-59-2	Toxic for reproduction (Article 57c)	For paints and varnishes.
	229	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	-	vPvB (Article 57e)	Used in the manufacture of rubber and plastics; as a flame retardant and plasticizer in PVC materials, wire and cable insulation, films and sheets, carpet backing, coated fabrics, wall coverings and adhesives.
	228	Isobutyl 4-hydroxybenzoate	224-208-8	4247-02-3	Endocrine disrupting properties (Article 57(f) - human health)	Used in paint products, fillers, putties, plasters, modeling clays, inks and toners.





	227	Melamine	203-615-4	108-78-1	<p>Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health);</p> <p>Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)</p>	<p>Starting material for various polymerization reactions, such as the production of formaldehyde-based resins and other melamine derivatives.</p>
	226	Perfluoroheptanoic acid and its salts	-	-	<p>Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e);</p> <p>Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health);</p> <p>Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)</p>	<p>It is used as a dispersant and surfactant in the suspension polymerization of tetrafluoroethylene.</p>





	225	reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	473-390-7	-	vPvB (Article 57e)	Transfer of substance or mixture (charging and discharging) at dedicated facilities. Use as laboratory reagent. Use as functional fluid at industrial site.
The 27th batch	224	N-(hydroxymethyl)acrylamide	213-103-2	924-42-5	Carcinogenic (Article 57a) Mutagenic (Article 57b)	Used as cross-linking agent, widely used in fiber modification resin, processing dye, plastic adhesive, soil stabilizer, etc.; Used as an organic synthesis monomer to prepare a variety of co-polymers.
The 26th batch	223	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	-	Endocrine disrupting properties (Article 57(f) - human health)	As a raw material for the synthesis of other compounds, it is also used in cosmetics, body care products, facial creams, etc.
	222	6,6'-di-tert-butyl-2,2'-methylene-dip-cresol (DBMC)	204-327-1	119-47-1	Toxic for reproduction (Article 57 c)	Used as antioxidant for natural rubber, synthetic rubber, latex, other synthetic materials and petroleum products.
	221	S-(tricyclo[5.2.1.0' ¹ 2,6]deca-3-en-8(401-850-9	255881-9-4-8	PBT (Article 57 d)	Used as a lubricant and lubricating oil.





		or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioa te				
	220	tris(2-methoxyethoxy)vinylsilane	213-934-0	1067-53-4	Toxic for reproduction (Article 57 c)	Used in the manufacture of plastics, rubbers, silica gels and sealants, etc.
The 25th batch	219	1,4-dioxane	204-661-8	123-91-1	Carcinogenic (Article 57a) Equivalent level of concern having probable serious effects to the environment (Article 57f -environment) Equivalent level of concern having probable serious effects to human health (Article 57f - human health)	It can be used as a solvent for synthetic chemicals.





218	2,2-bis(bromomethyl)propane-1,3-diol (BMP) 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA) 2,3-dibromo-1-propanol (2,3-DBPA)	221-967-7 253-057-0 202-480-9	3296-90-0 36483-57-5 1522-92-5 96-13-9	Carcinogenic (Article 57 a)	It can be used in the production of polymer resins, plastic products and chemicals. BMP: manufacture of polymer resins and in one component foam (OCPF) application. TBNPA: polymer production manufacture of plastics products, including compounding and conversion and as an intermediate. DBPA: registered as an intermediate.
217	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	—	—	Toxic for reproduction (Article 57 c)	It can be used in cleaning agents, cosmetics, in scented articles, polishes and wax blends.
216	4,4'-(1-methylpropylidene)bisphenol; (bisphenol B)(BPB)	201-025-1	77-40-7	Endocrine disrupting properties (Article 57f - human health and environment)	It can be used in manufacture of phenolic and polycarbonate resin, and used as a buffer for coatings in the food industry.
215	Glutaral	203-856-5	111-30-8	Respiratory sensitising properties (Article 57f - human health)	It can be used in Biocides, leather tanning, x-ray film processing, cosmetics.
214	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or	—	—	PBT (Article 57d) vPvB (Article 57e)	It can be used as flame retardants, plasticising additives in plastics, sealants, rubber and textiles.





		equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]				
	213	Orthoboric acid, sodium salt	237-560-2	13840-56-7	Toxic for reproduction (Article 57 c)	It can be used as solvent and corrosion inhibitor.
	212	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	—	—	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57f - human health and environment)	It can be used as an intermediate in the production of special resins, paints, lacquers and coating resins, and as monomers for phenol /formaldehyde resins and ink resins.
The 24th batch	211	Bis(2-(2-methoxyethoxy)ethyl)ether	205-594-7	143-24-8	Toxic for reproduction (Article 57 (c))	It can be used as a solvent for alkaline gold hydride. It can be used to purify synthetic gas, natural gas, acetylene and other gases. Also used in the production of inks, toners, plastics and rubber tires.
	210	Dioctyltin dilaurate, stannane,	—	—	Toxic for reproduction (Article 57 (c))	It can be used as stabilizer and catalyst for plastics, textiles and leather.





		dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety				
The 23st batch	209	1-vinylimidazole	214-012-0	1072-63-5	Toxic for reproduction (Article 57c)	Hardener for resin materials, photochemical reagents, cores of resin inclusions, also used in the petroleum industry and as polymers
	208	2-methylimidazole	211-765-7	693-98-1	Toxic for reproduction (Article 57c)	It is used in the production of pharmaceutical intermediates such as metronidazole, and is used as a curing agent for epoxy resins.
	207	Butyl 4-hydroxybenzoate	202-318-7	94-26-8	Endocrine disrupting properties (Article 57(f) - human health)	It is used for preservatives in daily chemical industry, medicine and food industry, as well as antiseptics for grease, starch paste, rubber solution, perfume, film, etc.
	206	Dibutylbis(pentane-2,4-dionato-O,O')tin	245-152-0	22673-19-4	Toxic for reproduction (Article 57c)	Mainly used as room temperature silicone rubber curing catalyst, especially suitable for deacetylated silicone products. It can also be used as a polyurethane coating catalyst.





The 22st batch	205	2-benzyl-2-dimethylamino-4'-morpholinobutyronone	404-360-3	119313-12-1	Toxic for reproduction (Article 57c)	Used in UV curing coatings and inks.
	204	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	Equivalent level of concern having probable serious effects to environment (Article 57f) Equivalent level of concern having probable serious effects to human health (Article 57 f)	Perfluorobutane sulfonic acid are used as catalysts in polymer manufacturing and chemical synthesis. Potassium of Perfluorobutane sulfonic acid are used as flame retardants in polycarbonate mainly in electrical and electronic equipment.
	203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	400-600-6	71868-10-5	Toxic for reproduction (Article 57c)	Used in painting art and electronic industry.
	202	Diisohexyl phthalate	276-090-2	71850-09-4	Toxic for reproduction (Article 57c)	It has the same potential as other phthalates (e.g. used as sealants, plasticizers in polymers etc.).
	201	2-methoxyethyl acetate	203-772-9	110-49-6	Toxic for reproduction (Article 57 (c))	Not registered under REACH.
The 21st batch	200	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	-	Endocrine disrupting properties (Article 57(f) - environment)	Primarily used as an antioxidant to stabilise polymers.





	199	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	-	Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment) Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health)	Processing aid in the production of fluorinated polymers.
	198	4-tert-butylphenol	202-679-0	98-54-4	Endocrine disrupting properties (Article 57(f) - environment)	Used in coating products, polymers, adhesives, sealants and for the synthesis of other substances.
The 20th batch	197	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	6807-17-6	Toxic for reproduction (Article 57c)	Potential use in thermal paper
	196	Benzo[k]fluoranthene	205-916-6	207-08-9	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)	Widely used in coatings, adhesives etc.
	195	Fluoranthene	205-912-4	206-44-0	PBT (Article 57d) vPvB (Article 57e)	Widely used in coatings, adhesives etc.
	194	Phenanthrene	201-581-5	85-01-8	vPvB (Article 57e)	Uses in Coatings and paints etc.





	193	Pyrene	204-927-3	129-00-0	PBT (Article 57d) vPvB (Article 57e)	Chemical intermediate
	192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	239-139-9	15087-24-8	Endocrine disrupting properties (Article 57(f) - environment)	As a UV absorber, it can be used in anti-frost or other cosmetics, skin care products, daily necessities and textile products.
The 19th batch	191	Octamethylcyclotetrasiloxane (D4)	209-136-7	556-67-2	PBT (Article 57d) vPvB (Article 57e)	Used in washing and cleaning products, polishes and waxes and cosmetics and personal care products.
	190	Decamethylcyclopentasiloxane (D5)	208-764-9	541-02-6	PBT (Article 57d) vPvB (Article 57e)	Used in washing and cleaning products, polishes and waxes, cosmetics and personal care products, textile treatment products and dyes.
	189	Dodecamethylcyclohexasiloxane (D6)	208-762-8	540-97-6	PBT (Article 57d) vPvB (Article 57e)	Used in washing and cleaning products, polishes and waxes, cosmetics and personal care products.
	188	Lead	231-100-4	7439-92-1	Toxic for reproduction (Article 57c)	Used in metals, welding and soldering products, metal surface treatment products, and polymers.
	187	Disodium octaborate	234-541-0	12008-41-2	Toxic for reproduction (Article 57c)	Used in anti-freeze products, heat transfer fluids, lubricants and greases, and washing and cleaning products.
	186	Benzo[ghi]perylene	205-883-8	191-24-2	PBT (Article 57d) vPvB (Article 57e)	Not registered under REACH. Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.





	185	Terphenyl hydrogenated	262-967-7	61788-32-7	vPvB (Article 57e)	Used as a plastic additive, solvent, in coatings/inks, in adhesives and sealants, and heat transfer fluids.
	184	Ethylenediamine (EDA)	203-468-6	107-15-3	Respiratory sensitising properties (Article 57(f) - human health)	Used in adhesives and sealants, coating products, fillers, putties, plasters, modelling clay, pH regulators and water treatment products.
	183	Benzene-1,2,4-tri carboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	209-008-0	552-30-7	Respiratory sensitising properties (Article 57(f) - human health)	Used in the manufacture of esters and polymers.
	182	Dicyclohexyl phthalate (DCHP)	201-545-9	84-61-7	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - human health)	Used in plastisol, PVC, rubber and plastic articles. A further use is also as a phlegmatiser and dispersing agent for formulations of organic peroxides.
The 18th batch	181	Dechlorane plus (including any of its individual anti- and syn-isomers or any combination thereof)	-	13560-89-9; 135821-74-8; 135821-03-3	vPvB	Used as a non-plasticising flame retardant, used in adhesives and sealants and in binding agents
	180	Benz[a]anthracene	200-280-6	56-55-3	Carcinogenic PBT vPvB	Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.





	179	Cadmium nitrate	233-710-6	10325-94-7	Carcinogenic Toxic	For the manufacture of glass, porcelain and ceramic products
	178	Cadmium carbonate	208-168-9	513-78-0	Carcinogenic Toxic	Used as a pH regulator and in water treatment products, cosmetics and personal care products.
	177	Cadmium hydroxide	244-168-5	21041-95-2	Carcinogenic Toxic	Used in laboratory chemicals and for the manufacture of electrical, electronic and optical equipment.
	176	Chrysene	205-923-4	218-01-9	Carcinogenic PBT vPvB	Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.
	175	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with≥0.1% w/w 4-heptylphenol, branched and linear]	-	-	Endocrine disruption	Used as a lubricant additive in lubricants and greases.
The 17th batch	174	Perfluorohexane-1-sulphonic acid and its salts	-	-	vPvB	Anti-fouling, waterproof and non-stick treatment, normally used in in fire foam components, surfactants, fluoropolymer manufacturing, water proof & anti-stains





						protecting coating in paper and textile.
The 16th batch	173	4,4'-isopropylidenediphenol (bisphenol A; BPA)	201-245-8	80-05-7	Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)	Manufacture of polycarbonate, epoxy resins and chemicals; hardener in epoxy resins
	172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	206-400-3 - 221-470-5	335-76-2 3830-45-3 3108-42-7	Toxic for reproduction (Article 57c) PBT (Article 57d)	Lubricant, wetting agent, plasticiser and corrosion inhibitor
	171	p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6	Equivalent level of concern having probable serious effects to environment (Article 57f)	Manufacture of chemicals and plastic products
	170	4-heptylphenol, branched and linear [substances with a linear and/or branched	-	-	Equivalent level of concern having probable serious effects to environment (Article 57f)	Manufacture of polymers; formulation into lubricants





		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]			e 57f)	
The 15th batch	169	Benzo[def]chryse ne	200-028-5	50-32-8	Carcinogenic (Article 57a) Mutagenic (Article 57b) Toxic for reproduction (Article 57c) PBT (Article 57 d) vPvB (Article 57 e)	Mainly used in the flue gas of coal tar, carbon black, and various types of coal and oil burning, cigarette smoke, automobile exhaust, as well as coking, oil refining, asphalt, plastics and other industrial sewage.
The 14th batch	168	Nitrobenzene	202-716-0	98-95-3	Toxic for reproduction (Article 57 c)	Manufacture of other substances
	167	2,4-di-tert-butyl-6-(5-chlorobenzo triazol-2-yl)phen ol (UV-327)	223-383-8	3864-99-1	vPvB (Article 57 e)	UV-protection agents in coatings, plastics, rubber and cosmetics
	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl	253-037-1	36437-37-3	vPvB (Article 57 e)	UV-protection agents in coatings, plastics, rubber and cosmetics





)phenol (UV-350)				
	165	1,3-propanesultone	214-317-9	1120-71-4	Carcinogenic (Article 57 a)	Electrolyte fluid of lithium ion batteries
	164	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1 21049-39-8 4149-60-4	Toxic for reproduction (Article 57 c) PBT (Article 57 d)	Processing aid for fluoropolymer manufacture/lubricating oil additive/surfactant for fire extinguishers/cleaning agent/textile antifouling finishing agent/polishing surfactant/waterproofing agents and in liquid crystal display panels
The 13th batch	163	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)	271-094-0 272-013-1	68515-51-5 68648-93-1	Toxic for reproduction (Article 57 c)	Mainly used as plasticizer and lubricant, used in the adhesive, paint, building material, PVC and art material (Such as modeling clay and finger paints etc.
	162	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-	/	/	vPvB (Article 57e)	Used as fragrance, widely used in perfume, soap, detergent and other daily necessities; meanwhile, it is also widely used in shampoo and textile softener.





		methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]				
The 12th batch	161	Cadmium fluoride	232-222-0	7790-79-6	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)	Used in phosphors, glass, and nuclear reactor controls
	160	Cadmium sulphate	233-331-6	10124-36-4; 31119-53-6	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)	Used as a pigment, also used in the production of solar cells
	159	2-benzotriazol-2-yl-4,6-di-tert-but	223-346-6	3846-71-7	PBT (Article 57 d); vPvB (Article 57 e)	Used as plastic additive, ultraviolet light absorber and





		ylphenol (UV-320)				light stabilizer
158		2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	PBT (Article 57 d); vPVB (Article 57 e)	Used as plastic additive, ultraviolet light absorber and light stabilizer
157		2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stanna tetradecanoate (DOTE)	239-622-4	15571-58-1	Toxic for reproduction (Article 57 c)	Used as a stabiliser for PVC processing
156		Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stanna tetradecanoate 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)	-	-	Toxic for reproduction (Article 57 c)	Used as a stabiliser for PVC processing





The 11th batch	155	Cadmium chloride	233-296-7	10108-64-2	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)	used for photocopying, dyeing and electroplating.
	154	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	Toxic for reproduction (Article 57 c)	Used as lubricant in steering fluid, and as plasticizers, also used in auto transmission lubricants .
	153	Sodium peroxometaborate	231-556-4	7632-4-4	Toxic for reproduction (Article 57 c)	Used as oxidant, disinfectants, fungicide, salt, deodorization agent, plating solution additives
	152	Sodium perborate; perboric acid, sodium salt	239-172-9;	-	Toxic for reproduction (Article 57 c)	Used as oxidant, decolorizer
The 10th batch	151	Cadmium sulphide	215-147-8	1306-23-6	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	Used as pigment, also used in manufacturing of photoresistors (light dependent resistors) sensitive to visible and near infrared light.
	150	Disodium 3,3'-[[1,1'-biphen	209-358-4	573-58-0	Carcinogenic(Article 57a)	used to stain microscopic preparates, especially as a





	yl]-4,4'-diylbis(azo)] bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)				cytoplasm and erythrocyte stain;
149	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)	217-710-3	1937-37-7	Carcinogenic (Article 57a)	used to: dye cellulose; dye leather, plastics, used as a resin filler; and produce aqueous inks.
148	Dihexyl phthalate	201-559-5	84-75-3	Toxic for reproduction (Article 57 c)	Used as plasticizer for cellulose & vinyl plastics.
147	Imidazolidine-2-thione (2-imidazoline-2-thiol)	202-506-9	96-45-7	Toxic for reproduction (Article 57 c)	Used primarily as an accelerator for vulcanizing polychloroprene (neoprene) and polyacrylate rubbers, also used in electroplating baths, as an intermediate in antioxidant production, and in dyes, pharmaceuticals, and synthetic resins.
146	Lead di(acetate)	206-104-4	301-04-2	Toxic for reproduction (Article 57 c)	Used as sweetener, also used in cosmetics
145	Trixylyl phosphate	246-677-8	25155-23-1	Toxic for reproduction	Used as flame-retardants and plasticizers





					(Article 57 c)	
The 9th batch	144	Cadmium	231-152-8	7440-43-9	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	Used as cadmium electrode, pigment, paint, plastics, metal plating, alloy etc.
	143	Cadmium oxide	215-146-2	1306-19-0	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (effects on kidney and bone) (Article 57 f)	Used as cadmium electrode, pigment, paint, plastics, metal plating, alloy etc.
	142	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	Toxic for reproduction (Article 57 c); PBT (Article 57 d)	Used as PVC dispersant by emulsion polymerization
	141	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	Toxic for reproduction (Article 57 c); PBT (Article 57 d)	Pharmaceutical and material Intermediates
	140	Dipentyl phthalate (DPP)	205-017-9	131-18-0	Toxic for reproduction (Article 57 c)	The substance can be used as plasticizer of cellulose resin, polystyrene, and chlorinated rubber to characterize film products with well elasticity, weather ability and tensile strength





	139	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]	—	—	Equivalent level of concern having probable serious effects to the environment (due to the endocrine disrupting properties of the degradation products) (Article 57 f)	Mainly used in production of surfactant, and also used in fields of antioxygen, textile auxiliaries, lubricating oil additives, pesticide emulsifier, resin modifier, and resin and rubber stabilizer.
The 8th batch	138	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	PBT (Article 57 d); vPvB (Article 57 e)	It is an efficient additive flame retardant, which is used in nylon fiber and polyester textiles.
	137	Pentacosafluorotridecanoic acid	276-745-2	72629-94-8	vPvB (Article 57 e)	Pharmaceutical and material Intermediates
	136	Tricosfluorododecanoic acid	206-203-2	307-55-1	vPvB (Article 57 e)	Pharmaceutical and material Intermediates
	135	Henicosfluoroundecanoic acid	218-165-4	2058-94-8	vPvB (Article 57 e)	Pharmaceutical and material Intermediates





134	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	vPvB (Article 57 e)	Pharmaceutical and material Intermediates
133	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	Equivalent level of concern having probable serious effects to human health (Article 57 f)	Used as various vesicant of foamed plastic, which is applied to PVC, EVA, PP etc.
132	Cyclohexane-1,2-dicarboxylic anhydride 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]	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3	Equivalent level of concern having probable serious effects to human health (Article 57 f)	Used as epoxy curing agent
131	Hexahydromethylphthalic anhydride[1], Hexahydro-4-methylphthalic anhydride[2], Hexahydro-1-methylphthalic anhydride[3], Hexahydro-3-methylphthalic anhydride [4]	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	Equivalent level of concern having probable serious effects to human health (Article 57 f)	Mainly used for the epoxy curing agent. Impregnation of coil of electrical equipments; casting of electrical components; and sealing of semiconductors, such as outdoor insulators, capacitors, light emitting diode, digital tube





		[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]				
The 8th batch	130	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]	-	-	Equivalent level of concern having probable serious effects to the environment (Article 57 f)	Mainly used in production of surfactant, and also used in fields of antioxygen, textile auxiliaries, lubricating oil additives, pesticide emulsifier, resin modifier, and resin and rubber stabilizer.
	129	4-(1,1,3,3-tetramethylbutyl)phenol , ethoxylated [covering	-	-	Equivalent level of concern having probable serious effects to the	Mainly used in production of surfactant, and also used in fields of antioxygen, textile auxiliaries, lubricating oil





		well-defined substances and UVCB substances, polymers and homologues]			environment (Article 57 f)	additives, pesticide emulsifier, resin modifier, and resin and rubber stabilizer.
128	Methoxyacetic acid	210-894-6	625-45-6		Toxic for reproduction (Article 57 c)	Organic chemical materials
127	N,N-dimethylformamide	200-679-5	68-12-2		Toxic for reproduction (Article 57 c)	Mainly used for a polyacrylonitrile fiber spinning solvent; a gas absorber in the petrochemical industry ; and the selectivity for acetylene absorption and separation and purification of butadiene, the solvent used in leather production, used for synthetic chlordimeform medicine in pesticides; used to synthesis sulfadiazine, doxycycline, cortisone, vitamin B6
126	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1		Toxic for reproduction (Article 57 c)	Pesticides, fungicides in paint
125	Lead monoxide (Lead oxide)	215-267-0	1317-36-8		Toxic for reproduction (Article 57 c)	Used as white lead pigment, the manufacture of lead soaps, metallurgical cosolvents, paint driers, ceramic materials, rubber vulcanization accelerator, pesticides, lead salt stabilizer in plastics materials, raw materials of lead glass





						industry, and intermediate raw material of lead salt industry
The 8th batch	124	Orange lead (Lead tetroxide)	215-235-6	1314-41-6	Toxic for reproduction (Article 57 c)	Used in production of battery, glass, pottery, ceramic, and used as a protective surface layer of the anti-rust pigment and iron, as well as dyes and other synthetic organic oxidant
	123	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	Toxic for reproduction (Article 57 c)	Used for plating of terne metal in printed circuit and lead low-temperature welding. Also used as an analytical reagent; can be used as the circuit boards, tin lead alloy plating in electroplating
	122	Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	Toxic for reproduction (Article 57 c)	Mainly used in paint, especially suitable for manufacturing antirust paint and outdoor paint
	121	Lead titanium trioxide	235-038-9	12060-00-3	Toxic for reproduction (Article 57 c)	Used for manufacturing complex electronic ceramics such as the BaTiO ₃ -PbTiO ₃ and PbZrO ₃ -PbTiO ₃ , to improve the electrical properties of ceramics. Also used as a pigment for paint.
	120	Lead titanium zirconium oxide	235-727-4	12626-81-2	Toxic for reproduction (Article 57 c)	Used for manufacturing complex electronic ceramics to improve the electrical properties of ceramics. Also





						used as a pigment for paint
119	Silicic acid, lead salt	234-363-3	11120-22-2	Toxic for reproduction (Article 57 c)	Mainly used in the manufacture of optical glass, CRT, optical fiber, household utensils and low melting point solder	
118	Silicic acid (H ₂ Si ₂ O ₅), 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]	272-271-5	68784-75-8	Toxic for reproduction (Article 57 c)	Used for manufacturing complex electronic ceramics to improve the electrical properties of ceramics.	
117	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	Toxic for reproduction (Article 57 c)	Used for the synthesis of pharmaceuticals, pesticides, dyes, spices, etc	





The 8th batch	116	Methyloxirane (Propylene oxide)	200-879- 2	75-56-9	Carcinogenic (Article 57a); Mutagenic (Article 57b)	Used as important basic organic chemical synthesis of raw materials, mainly used for the production of polyether, propylene glycol. Propylene oxide derivatives are widely used in the automotive, construction, food, tobacco, pharmaceutical and cosmetics industries
	115	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032- 2	84777-06 -0	Toxic for reproduction (Article 57 c)	The substance can be used as plasticizer of cellulose resin, polystyrene, and chlorinated rubber to characterize film products with well elasticity, weather ability and tensile strength
	114	Diisopentylphthalate (DIPP)	210-088- 4	605-50-5	Toxic for reproduction (Article 57 c)	The substance can be used as plasticizer of cellulose resin, polystyrene, and chlorinated rubber to characterize film products with well elasticity, weather ability and tensile strength
	113	N-pentyl-isopentylphthalate	-	776297-6 9-9	Toxic for reproduction (Article 57 c)	The substance can be used as plasticizer of cellulose resin, polystyrene, and chlorinated rubber to characterize film products with well elasticity, weather ability and tensile strength





112	1,2-diethoxyethane	211-076-1	629-14-1	Toxic for reproduction (Article 57 c)	Used as acrylic resin, methacrylic resin, epoxy resin and a nitro group, and a solvent such as ethyl cellulose, but also as extraction agents in pharmaceutical industry; lubricating oil additives; paint remover; paint coatings; solvents, etc.
111	Acetic acid, lead salt, basic	257-175-3	51404-69-4	Toxic for reproduction (Article 57 c)	As analytical reagent, also used in the pharmaceutical industry
110	Lead oxide sulfate	234-853-7	12036-76-9	Toxic for reproduction (Article 57 c)	Use as white pigment and heat stabilizer in plastics.
109	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	Toxic for reproduction (Article 57 c)	Used as high-temperature electrical insulation materials, foam products and rolled products
108	Dioxobis(stearato)trilead	235-702-8	12578-12-0	Toxic for reproduction (Article 57 c)	Used for manufacturing complex electronic ceramics to improve the electrical properties of ceramics.
107	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	Toxic for reproduction (Article 57 c)	Used in manufacture of paint, printing ink
106	Lead cyanidate	244-073-9	20837-86-9	Toxic for reproduction (Article 57 c)	Mainly used in plating (both electrolytic and electroless) processes for electronic components (such as printed circuit boards).





The 8th batch	105	Lead dinitrate	233-245-9	10099-74-8	Toxic for reproduction (Article 57 c)	Milk yellow pigment. Used as coal agent In printing and dyeing industry. Used in production of other lead salts, lead dioxide and convergence agent. Tanning agent; Sensitizer. Used as flotation agents in mining industry. Oxidant, as well as the analytical chemistry of chemical reagents
	104	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	Toxic for reproduction (Article 57 c)	Used for manufacturing complex electronic ceramics to improve the electrical properties of ceramics.
	103	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	Toxic for reproduction (Article 57 c)	Used in manufacture of coloration of paint, printing ink, rubbers and plastic products.
	102	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	Toxic for reproduction (Article 57 c)	Used in manufacture of storage batteries, glasses, potteries and ceramic, also used as protective surface of rust resisting pigments and iron, and a oxidant of dyes and other organic compounds.
	101	Tetraethyllead	201-075-4	78-00-2	Toxic for reproduction (Article 57 c)	Used for gasoline seismic additives to improve the octane number, and for organic synthesis
	100	Tetralead trioxide sulphate	235-380-9	12202-17-4	Toxic for reproduction (Article 57 c)	Used as a PVC stabilizer; having harmonized effects used with dibasic lead phosphate.





	99	Trilead dioxide phosphonate	235-252-2	12141-20-7	Toxic for reproduction (Article 57 c)	Used for manufacturing complex electronic ceramics to improve the electrical properties of ceramics.
	98	Furan	203-727-3	110-00-9	Carcinogenic (Article 57a)	For organic synthesis or as a solvent. Used in the production of nitrofurazone. Furan is a nice rich electrophilic aromatic heterocyclic
	97	Diethyl sulphate	200-589-6	64-67-5	Carcinogenic (Article 57a); Mutagenic (Article 57b)	Used as food flavor, perfume fragrance and soap flavor; for phenols Ethoxylation; It is a very important plant mutagen used to cultivate new varieties, fast and efficient; used as an excellent organic solvent and extractant; also intermediates used to synthetic pharmaceuticals, paints, dyes, etc
The 8th batch	96	Dimethyl sulphate	201-058-1	77-78-1	Carcinogenic (Article 57a)	Used in the manufacture of dyes and methylating agents of amines and alcohols; Analytical reagent. Organic synthesis; Methylation reagent; Solvents. Its vapor is highly toxic, was used as a poison gas of war. For the determination of the reagent of the coal tars; used in organic synthesis as a methyl substituted agent
	95	3-ethyl-2-methyl-2-(3-methylbutyl)	421-150-7	143860-04-2	Toxic for reproduction	Used as a styrene polymerization inhibitors and





		-1,3-oxazolidine			(Article 57 c)	pesticide intermediates
94	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7		Toxic for reproduction (Article 57 c)	Used as a styrene polymerization inhibitors and pesticide intermediates
93	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0		Carcinogenic (Article 57a)	used for the high-temperature varnish, capacitor films, printed circuit board and aviation parts
92	4,4'-oxydianiline and its salts	202-977-0	101-80-4		Carcinogenic (Article 57a); Mutagenic (Article 57b)	Used in production of heat stability plastics and as cross-linking agent.
91	4-aminoazobenzene	200-453-6	60-09-3		Carcinogenic (Article 57a)	Used as dye intermediates. Used in the synthesis of azo dyes, disperse dyes, oxazine dyes; also used in making paints and pigments, as well as alcohol-soluble yellow and pH indicator
90	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7		Carcinogenic (Article 57a)	TDI, sulfur dyes, basic dyes, disperse dyes, pharmaceutical intermediates and other organic synthesis
89	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8		Carcinogenic (Article 57a)	Suitable for direct, disperse, reactive dyes Synthesis
88	Biphenyl-4-ylamine	202-177-1	92-67-1		Carcinogenic (Article 57a)	Dye and pesticide intermediates; also used for manufacturing scintillatort paraterphenyl; manufacturing dyes; Cancer Research; organic synthesis;





	87	o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]	202-591-2	97-56-3	Carcinogenic (Article 57a)	Used to make dyes and drugs, and used as a maroon base GBC (Fast Gamet GBC base, formerly known as purple caramel base G or GC)
	86	o-toluidine	202-429-0	95-53-4	Carcinogenic (Article 57a)	Use as dye intermediates, organic synthesis and synthesis of saccharin
	85	N-methylacetamide	201-182-6	79-16-3	Toxic for reproduction (Article 57 c)	pharmaceutical industry, catalyst, deacidifying agent
The 7th batch	84	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	Toxic for reproduction (Article 57c)	Mainly used as a solvent or as a processing aid in the manufacture and formulation of industrial chemicals. Minor use in brake fluids and repair of motor vehicles.
	83	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	Toxic for reproduction (Article 57c)	Mainly used as a solvent or as a processing aid in the manufacture and formulation of industrial chemicals, including use as an electrolyte solvent in lithium batteries.
	82	Diboron trioxide	215-125-8	1303-86-2	Toxic for reproduction (Article 57c)	Used in a multitude of applications, e.g., in glass and glass fibres, frits, ceramics, flame retardants, catalysts, industrial fluids, metallurgy, adhesives, inks/paints, film developers solutions, detergents and cleaners, biocides and insecticides.





81	Formamide	200-842-0	75-12-7	Toxic for reproduction (Article 57c)	Mainly used as an intermediate. Minor uses as solvent, as reagent chemical (in the pharmaceutical industry) and as laboratory chemical. The substance seems further to be used in the agrochemical industry and as a plasticiser.
80	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	Toxic for reproduction (Article 57c)	Mainly used in plating (both electrolytic and electroless) processes for electronic components (such as printed circuit boards).
79	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	219-514-3	2451-62-9	Mutagenic (Article 57b)	Mainly used as a hardener in resins and coatings; also used in inks for the printed circuit board industry, electrical insulation material, resin moulding systems, laminated sheeting, silk screen printing coatings, tools, adhesives, lining materials and stabilisers for plastics.
78	β -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	423-400-0	59653-74-6	Mutagenic (Article 57b)	Mainly used as a hardener in resins and coatings; also used in inks for the printed circuit board industry, electrical insulation material, resin moulding systems, laminated sheeting, silk screen printing coatings, tools, adhesives, lining materials and stabilisers for plastics.





	77	4,4'-bis(dimethyl amino)benzophenone (Michler's ketone)	202-027-5	90-94-8	Art. 57 (a), carcinogenic	Intermediate in the manufacture of triphenylmethane dyes and other substances. Further potential uses include as additive (photosensitizer) in dyes and pigments, in dry film products, as a process chemical in the production of electronic circuit boards, in research and development applications.
The 7th batch	76	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	Art. 57 (a), carcinogenic	Intermediate in the manufacture of dyes and other substances. Used also as chemical reagent in research and development.
	75	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	208-953-6	548-62-9	Art. 57 (a), carcinogenic	Used mainly for paper colouring and inks supplied in printer cartridges and ball pens. Further uses include staining of dried plants, marker for increasing the visibility of liquids, staining in microbial and clinical laboratories.
	74	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I.	219-943-6	2580-56-5	Art. 57 (a), carcinogenic	Used in the production of inks, cleaners, and coatings, as well as for dyeing of paper, packaging, textiles, plastic products, and other types of articles. It is also used in diagnostic and analytical applications.





		Basic Blue 26)				
	73	α , α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)na phthalene-1-met hanol (C.I. Solvent Blue 4)	229-851- 8	6786-83- 0	Art. 57 (a), carcinogenic	Mainly used in the production of printing and writing inks, for dyeing of paper and in mixtures such as windscreen washing agents.
	72	4,4'-bis(dimethyl amino)-4''-(meth ylamino)trityl alcohol	209-218- 2	561-41-1	Art. 57 (a), carcinogenic	Used in the production of writing inks and potentially in the production of other inks, as well as for dyeing of a variety of materials.
The 6th batch	71	Dichromium tris(chromate)	246-356- 2	24613-89 -6	Art. 57 (a), carcinogenic	used in mixtures to treat metal surfaces in the aeronautic/aerospace, steel and aluminium coating sectors
	70	Potassium hydroxyoctaoxodi zincatedichromat e	234-329- 8	11103-86 -9	Art. 57 (a), carcinogenic	used in the aeronautic/aerospace, steel, aluminium coil and vehicle coating sectors
	69	Pentazinc chromate octahydroxide	256-418- 0	49663-84 -5	Art. 57 (a), carcinogenic	used in the vehicle coating and aeronautic/aerospace sectors
	68	Zirconia Aluminosilicate Refractory Ceramic Fibres	-	-	Art. 57 (a), carcinogenic	used for high-temperature insulation in industrial applications and in fire protection
	67	Aluminosilicate Refractory Ceramic Fibres	-	-	Art. 57 (a), carcinogenic	used for high-temperature insulation in industrial applications and in fire





						protection
	66	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	Art. 57 (a), carcinogenic	used to manufacture other substances
	65	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	Toxic for reproduction (Article 57c)	little presumed use as ECHA has not received any registration for the substance
	64	2-Methoxyaniline ; o-Anisidine	201-963-1	90-04-0	Art. 57 (a), carcinogenic	used in the vehicle coating and aeronautic/aerospace sectors
	63	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	Equivalent level of concern having probable serious effects to the environment (article 57 f)	mainly used to manufacture polymer preparations and ethoxylates
	62	1,2-dichloroethane	203-458-1	107-06-2	Art. 57 (a), carcinogenic	used to manufacture other substances
	61	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	Toxic for reproduction (Article 57c)	used to manufacture dyes for tattooing and colouring paper, polymers and aluminium foil
The 6th batch	60	Arsenic acid	231-901-9	7778-39-4	Art. 57 (a), carcinogenic	Arsenic acid is mainly used to remove gas bubbles from ceramic glass melt (fining agent) and in the production of laminated printed circuit boards. To lesser extent the substance is also used in the manufacture of semiconductors and as laboratory agent.





59	Calcium arsenate	231-904-5	7778-44-1	Art. 57 (a), carcinogenic	present in complex raw materials imported to manufacture copper, lead and a range of precious metals.
58	Trilead diarsenate	222-979-5	3687-31-8	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	present in complex raw materials imported to manufacture copper, lead and a range of precious metals
57	N,N-dimethylacetamide (DMAC)	204-826-4	127-19-5	Carcinogenic (article 57 a)	used as solvent and in industrial coatings, polyimide films, paint strippers and ink removers
56	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	202-918-9	101-14-4	Art. 57 (a), carcinogenic	mainly used as curing agent in resins and to produce polymer articles
55	Phenolphthalein	201-004-7	77-09-8	Art. 57 (a), carcinogenic	used as laboratory agent (in pH indicator solutions), to produce pH-indicator paper and in medicinal products
54	Lead diazide, Lead azide	236-542-1	13424-46-9	Toxic for reproduction (Article 57c)	Lead diazide is mainly used as initiator or booster in detonators for both civilian and military uses and as initiator in pyrotechnic devices.
53	Lead styphnate	239-290-0	15245-44-0	Toxic for reproduction (Article 57c)	Lead styphnate is mainly used as a primer for small calibre and rifle ammunition. Other common uses are in ammunition pyrotechnics, powder actuated devices and detonators for civilian use.





	52	Lead dipicrate	229-335-2	6477-64-1	Art. 57 (c), toxic for reproduction	No registration for lead dipicrate has been submitted to ECHA. The substance is an explosive like lead diazide and lead styphnate. It may be used in low amounts in detonator mixtures together with the two other mentioned lead compounds.
The 5th batch	51	2-ethoxyethyl acetate	203-839-2	111-15-9	Art. 57 (c), toxic for reproduction	Main uses in the past were as solvent in coatings and in the chemical industry, but also as intermediate in the manufacture of cyanoacrylate adhesives.
	50	Strontium chromate	232-142-6	7789-06-2	Art. 57 (a), carcinogenic	Strontium chromate is mainly used as corrosion inhibitor in coating mixtures used in the aeronautic/aerospace sector, in the coil coating sector of steel and aluminium and in the vehicle coating sector.
	49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	271-084-6	68515-42-4	Art. 57 (c), toxic for reproduction	Main uses in the past were as plasticizer in PVC, foam, adhesives and coatings.
	48	Hydrazine	206-114-9	7803-57-8 302-01-2	Art. 57 (a), carcinogenic	Hydrazine is mainly used as intermediate in the manufacture of hydrazine derivatives, as a monomer in polymerisations, as a corrosion inhibitor in water treatment and for metal reduction and





						refining of chemicals. It is also used as a propellant for aerospace vehicles and as fuel in military (emergency) power units.
47	1-methyl-2-pyrrolidone	212-828-1	872-50-4	Art. 57 (c), toxic for reproduction		1-methyl-2-pyrrolidone is mainly used as solvent in coatings, cleaning products, for electronic equipment manufacture, as well as in semiconductor industry, petrochemical processing, pharmaceuticals and agrochemicals.
46	1,2,3-trichloropropane	202-486-1	96-18-4	Art. 57 (a) & (c), carcinogenic & toxic for reproduction		1,2,3-trichloropropane is mainly used as intermediate in the manufacture of chlorinated solvents and agricultural products. It is also used as monomer. In the past 1,2,3-trichloropropane was used as solvent, paint and varnish remover and as degreasing agent.
45	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	276-158-1	71888-89-6	Art. 57 (c), toxic for reproduction		Main uses in the past were as plasticiser in PVC and in sealants, coatings and potentially printing inks.





The 4th batch	44	Cobalt(II) sulphate	233-334- 2	10124-43 -3	Art. 57 (a) & (c), carcinogenic & toxic for reproduction	Mainly used in the production of other chemicals. Further applications may include manufacture of catalysts and driers, surface treatments (such as electroplating), corrosion prevention, production of pigments, decolourising (in glass, pottery), batteries, animal food supplement, soil fertilizer, and others.
	43	Cobalt(II) dinitrate	233-402- 1	10141-05 -6	Art. 57 (a) & (c), carcinogenic & toxic for reproduction	Mainly used in the production of other chemicals and the manufacture of catalysts. Further applications may include surface treatment and batteries.
	42	Cobalt(II) carbonate	208-169- 4	513-79-1	Art. 57 (a) & (c), carcinogenic & toxic for reproduction	Mainly used in the manufacture of catalysts. Minor uses may include feed additive, production of other chemicals, production of pigments, and adhesion (in ground coat frit).
	41	Cobalt(II) diacetate	200-755- 8	71-48-7	Art. 57 (a) & (c), carcinogenic & toxic for reproduction	Mainly used in the manufacture of catalysts. Minor uses may include production of other chemicals, surface treatment, alloys, and production of pigments, dyes, rubber adhesion, and feed additive.





	40	2-Methoxyethanol	203-713-7	109-86-4	Toxic for reproduction (article 57c)	Mainly used as solvent, chemical intermediate and additive for fuels.
	39	2-Ethoxyethanol	203-804-1	110-80-5	Toxic for reproduction (article 57c)	Mainly used as solvent and chemical intermediate.
	38	Chromium trioxide	215-607-8	1333-82-0	Carcinogenic and mutagenic (articles 57 a and 57 b)	Used for metal finishing and as fixing agent in waterborne wood preservatives.
	37	Acids generated from chromium trioxide and their oligomers	231-801-5 236-881-5	7738-94-5 13530-68-2	Carcinogenic (article 57a)	These acids and their oligomers are generated when chromium trioxide is dissolved in water. Chromium trioxide is mainly used in form of aqueous solutions. Consequently, the uses of these substances are the same as indicated for chromium trioxide.
The 3rd batch	36	Trichloroethylene	201-167-4	79-01-6	Carcinogenic category 2	<ul style="list-style-type: none"> · Cleaning and degreasing of metal parts · Solvent in adhesives · Intermediate in the manufacture of chlorinated and fluorinated organic compounds
	35	Boric acid	233-139-2 234-343-4	10043-35-3 11113-50-1	Toxic for reproduction category 2	<ul style="list-style-type: none"> · Uses include a multitude of applications, e.g, in biocides and preservatives, personal care products, food additives, glass, ceramics, rubber, fertilisers, flame retardants, paints, industrial fluids, brake fluids, soldering products, film





						developers.
	34	Disodium tetraborate, anhydrous	215-540-4	1330-43-4 12179-04-3 1303-96-4	Toxic for reproduction category 2	Uses include a multitude of applications, e;g; in glass and glass fibres, ceramics, detergents and cleaners, personal care products, industrial fluids, metallurgy, adhesives, flame retardants, biocides, fertilizers.
	33	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	toxic for reproduction category 2	Uses include a multitude of applications, e;g; in glass and glass fibres, ceramics, detergents and cleaners, personal care products, industrial fluids, metallurgy, adhesives, flame retardants, biocides, fertilizers.
The 3rd batch	32	Sodium chromate	231-889-5	7775-11-3	Carcinogenic category 2; mutagenic category 2; toxic for reproduction category 2	<ul style="list-style-type: none"> · Laboratory (analytical agent) · Manufacture of other chromium compounds
	31	Potassium chromate	232-140-5	7789-00-6	Carcinogenic category 2; mutagenic category 2	<ul style="list-style-type: none"> · Treatment and coating of metals · Manufacture of reagents and chemicals · Manufacture of textiles · Colouring agent in ceramics





						<ul style="list-style-type: none"> · Tanning and dressing of leather · Manufacture of pigments/inks · Laboratory (analytical reagent) · Pyrotechnics
	30	Ammonium dichromate	232-143-1	7789-9-5	Carcinogenic category 2; mutagenic category 2; toxic for reproduction category 2	<ul style="list-style-type: none"> · Oxidising agent · Laboratory (analytical agent) · Tanning of leather · Manufacture of textiles · Manufacture of photosensitive screens (cathode ray tubes) · Metal treatment
	29	Potassium dichromate	231-906-6	7778-50-9	Carcinogenic category 2; mutagenic category 2; toxic for reproduction category 2	<ul style="list-style-type: none"> · Chrome metal manufacturing · Treatment and coating of metals · Manufacture of reagents and chemicals · Laboratory (analytical agent) · Cleaning of laboratory glassware · Tanning of leather · Manufacture of textiles · Photolithography · Wood treatment · Corrosion inhibitor in cooling systems
The 2nd batch	28	Anthracene oil	292-602-7	90640-80-5	Art. 57 (c), toxic for reproduction	Seal coating, anti-corrosion oil, pesticides, materials of anthraquinone





27	Anthracene oil, anthracene paste, distin.lights	295-278-5	91995-17-4	Art. 57 (c), toxic for reproduction	Seal coating, anti-corrosion oil, pesticides, materials of anthraquinone
26	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	Art. 57 (c), toxic for reproduction	Seal coating, anti-corrosion oil, pesticides, materials of anthraquinone
25	Anthracene oil, anthracene-low	292-604-8	90640-82-7	Art. 57 (c), toxic for reproduction	Seal coating, anti-corrosion oil, pesticides, materials of anthraquinone
24	Anthracene oil,anthracene paste	292-603-2	90640-81-6	Art. 57 (c), toxic for reproduction	Seal coating, anti-corrosion oil, pesticides, materials of anthraquinone
23	Diisobutyl phthalate (DIBP)	201-553-2	84-69-5	Art. 57 (a), carcinogenic	Plasticizer
22	2,4-Dinitrotoluen e	204-450-0	121-14-2	Art. 57 (a), carcinogenic	Material of explosives, poluurethane plastics, organic synthesis and dyes
21	Lead chromate	266-028-2	65996-93-2	Art. 57 (c), toxic for reproduction	Paint,moisture,adhesives
20	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	Art. 57 (a), carcinogenic	Flame retardants,flame retardant plasticizer
19	Lead sulfochromate yellow(C.I.Pigment Yellow 34)	215-693-7	1344-37-2	Art. 57 (a), carcinogenic	Additives in coatings,paints and plastics
18	Lead chromate molybdate sulphate red (C.I.Pigment Red 104)	235-759-9	12656-85-8	Art. 57 (a), carcinogenic	Additives in coatings,paints and plastics





	17	Lead chromate	231-846-0	7758-97-6	Art. 57 (a), carcinogenic	Colorant in coatings,paints,rubber and plastic
	16	Acrylamide	201-173-7	79-06-1	Art. 57 (a), carcinogenic	Preparation of acrylamide
The 1st batch	15	Anthracene	204-371-1	120-12-7	PBT (article 57d)	Material of dyes and anthraquinone
	14	4,4'-Diaminodiphenyl methane (MDA)	202-974-4	101-77-9	Carcinogenic category 2	Curing agent of PCB, Preparation of PU and azo dyes
	13	Dibutyl phthalate (DBP)	201-557-4	84-74-2	Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - environment); Endocrine disrupting properties (Article 57(f) - human health)	sticizer in PVC and other plastic products
	12	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	toxic for reproduction category 2	Plasticizer in PVC and acrylic resin





	11	Cobalt dichloride	231-589-4	7646-79-9	Art. 57 (c), toxic for reproduction	<p>Cobalt dichloride is mainly used as intermediate in the manufacture of other cobalt compounds, in tyre adhesion additives, organic textile dyes, and drying agents for paints.</p> <p>Furthermore it is used in surface treatment processes, as water treatment / corrosion inhibition chemical, as colourant or for discolouring in the production of inorganic pigments & frits, glass, and ceramic ware, in varistors and magnets, as well as in humidity indicators.</p>
	10	Diarsenic pentaoxide	215-116-9	1303-28-2	Carcinogenic category 1	Pesticides, herbicides, wood preservatives
	9	Diarsenic trioxide	215-481-4	1327-53-3	Carcinogenic category 1	Pesticides, herbicides, wood preservatives
	8	Sodium dichromate	234-190-3	7789-12-0, 10588-01-9	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)	Mordant in the textile dye industry
	7	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	201-329-4	81-15-2	vPvB (Article 57e)	Artificial musk, used in cosmetics and soaps
	6	Bis (2-ethylhexyl)pht halate (DEHP)	204-211-0	117-81-7	Toxic for reproduction (Article 57c) Endocrine	Commonly used plasticizers for plastics, rubber, etc.





					disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health)	
	5	Hexabromocyclo dodecane	247-148-4 221-695-9	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	PBT (Article 57d)	flame retardant
	4	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	PBT (Article 57d) vPvB (Article 57e)	Flame retardants, plasticizers
	3	Bis(tributyltin) oxide (TBTO)	200-268-0	56-35-9	PBT (Article 57d)	Fungicides, protective agents for wood and textiles, heat stabilizers for plastics
	2	Lead hydrogen arsenate	232-064-2	7784-40-9	Carcinogenic (Article 57a) Toxic for reproduction (Article 57c)	pesticides





	1	Triethyl arsenate	427-700-2	15606-95-8	Carcinogenic (Article 57a)	wood preservatives
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