



## The latest REACH SVHC list

**As of November 6, 2025**

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                                                                                                                                                                                                                                             |
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| The 35th batch | 251 | 1,1'-(ethane-1,2-diyl)bis[pentabromobenzene]                                                                                                                                                                                             | 284-366-9 | 84852-53-9 | vPvB (Article 57e)                   | The most common technical function of DBDPE is the use as a flame retardant in a wide variety of polymers. Also used in adhesives and sealants, coating products, polymers, washing and cleaning products as well as cosmetics and personal care products. |
| The 34th batch | 250 | tetra(sodium/potassium) 7-[(E)-(2-acetamido-4-[(E)-(4-[[4-chloro-6-[(2-[(4-fluoro-6-[[4-(vinylsulfonyl)phenyl]amino)-1,3,5-triazine-2-yl]amino)propyl]amino)-1,3,5-triazine-2-yl]amino)-5-sulfonato-1-naphthyl]diazenyl]-5-methoxyphenyl | 466-490-7 | /          | Toxic for reproduction (Article 57c) | Textile treatment products and dyes.                                                                                                                                                                                                                       |





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|                       |     | l]diazanyl]-1,3,6-naphthalenetrisulfonate; Reactive Brown 51                       |           |              |                                      |                                                                                                                                                 |
|                       | 249 | Decamethyltetrasiloxane                                                            | 205-491-7 | 141-62-8     | vPvB (Article 57e)                   | Used in cosmetics and personal care products, washing and cleaning products.                                                                    |
|                       | 248 | 1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane (M3T)                 | 241-867-7 | 17928-28-8   | vPvB (Article 57e)                   | Used in cosmetics, personal care products and perfume.                                                                                          |
| <b>The 33rd batch</b> | 247 | Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives | 421-820-9 | 192268-65-8  | PBT (Article 57d)                    | Hydraulic fluids and lubricants and greases.                                                                                                    |
|                       | 246 | 6-[(C10-C13)-alkyl-(branched, unsaturated)-2,5-dioxopyrrolidin-1-yl]hexanoic acid  | 701-118-1 | 2156592-54-8 | Toxic for reproduction (Article 57c) | Hydraulic fluids, lubricants and greases and metal working fluids.                                                                              |
|                       | 245 | O,O,O-triphenyl phosphorothioate                                                   | 209-909-9 | 597-82-0     | PBT (Article 57d)                    | Lubricants and greases, cooling liquids in refrigerators, hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids. |
|                       | 244 | Perfluamine                                                                        | 206-420-2 | 338-83-0     | vPvB (Article 57e)                   | Anti-corrosion transmission fluid, dielectric insulation fluid, electronic components and device leak detection fluid.                          |
|                       | 243 | Octamethyltrisiloxane                                                              | 203-497-4 | 107-51-7     | vPvB (Article 57e)                   | Used in cosmetics and personal care products, washing and cleaning products.                                                                    |





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| <b>The 32nd batch</b> | 242 | Triphenyl phosphate                                                                  | 204-112-2 | 115-86-6    | Endocrine disrupting properties (Article 57(f) - environment)               | Flame retardants and plasticizers                                                                                                            |
| <b>The 31st batch</b> | 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.                                        |
| <b>The 30th batch</b> | 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.                                      |





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| 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'-tetrabrom-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);<br>Endocrine disrupting properties (Article 57(f) - environment);<br>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.                                                                                                                 |





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





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|                               |     |                                                                                                                                                                                                 |               |          | health (Article 57(f)<br>- human health);<br>Equivalent level of<br>concern having<br>probable serious<br>effects to the<br>environment<br>(Article 57(f) -<br>environment) |                                                                                                                                                                                                                               |
|                               | 225 | reaction mass of<br>2,2,3,3,5,5,6,6-oct<br>afluoro-4-(1,1,1,2<br>,3,3,3-heptafluor<br>opropan-2-yl)morp<br>holine and<br>2,2,3,3,5,5,6,6-oct<br>afluoro-4-(heptaf<br>luoropropyl)morp<br>holine | 473-390-<br>7 | -        | vPvB (Article 57e)                                                                                                                                                          | Transfer of substance or<br>mixture (charging and<br>discharging) at dedicated<br>facilities.<br>Use as laboratory reagent.<br>Use as functional fluid at<br>industrial site.                                                 |
| <b>The<br/>27th<br/>batch</b> | 224 | N-(hydroxymethyl<br>)acrylamide                                                                                                                                                                 | 213-103-<br>2 | 924-42-5 | Carcinogenic<br>(Article 57a)<br>Mutagenic (Article<br>57b)                                                                                                                 | Used as cross-linking agent,<br>widely used in fiber<br>modification resin, processing<br>dye, plastic adhesive, soil<br>stabilizer, etc.;<br>Used as an organic synthesis<br>monomer to prepare a variety<br>of co-polymers. |
| <b>The<br/>26th<br/>batch</b> | 223 | (±)-1,7,7-trimethy<br>l-3-[(4-methylphe<br>nyl)methylene]bic<br>yclo[2.2.1]heptan<br>-2-one covering<br>any of the<br>individual                                                                | -             | -        | Endocrine<br>disrupting<br>properties (Article<br>57(f) - human<br>health)                                                                                                  | As a raw material for the<br>synthesis of other compounds,<br>it is also used in cosmetics,<br>body care products, facial<br>creams, etc.                                                                                     |





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|  |     | isomers and/or combinations thereof (4-MBC)                                                                                                                       |           |             |                                       |                                                                                                                    |
|  | 222 | 6,6'-di-tert-butyl-2,2'-methylenedi-p-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' <sup>2,6</sup> ]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate | 401-850-9 | 255881-94-8 | PBT (Article 57 d)                    | Used as a lubricant and lubricating oil.                                                                           |
|  | 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.                                       |





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| The<br>25th<br>batch | 219 | 1,4-dioxane                                                                                                                                                                    | 204-661-8                           | 123-91-1                                        | Carcinogenic<br>(Article 57a)<br>Equivalent level of concern having probable serious effects to the environment<br>(Article 57f -environment)<br>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)propane1,3-diol (BMP)<br>2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)<br>2,3-dibromo-1-propanol (2,3-DBPA) | 221-967-7<br>253-057-0<br>202-480-9 | 3296-90-0<br>36483-57-5<br>1522-92-5<br>96-13-9 | Carcinogenic<br>(Article 57 a)                                                                                                                                                                                                                            | It can be used in the production of polymer resins, plastic products and chemicals.<br>BMP: manufacture of polymer resins and in one component foam (OCPF) application.<br>TBNPA: polymer production manufacture of plastics products, including compounding and conversion and as an intermediate.<br>DBPA: registered as an intermediate. |
|                      | 217 | 2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers                                                                                                         | —                                   | —                                               | Toxic for reproduction<br>(Article 57 c)                                                                                                                                                                                                                  | It can be used in cleaning agents, cosmetics, in scented articles, polishes and wax blends.                                                                                                                                                                                                                                                 |





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|  | 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 equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17] | —         | —          | PBT (Article 57d)<br>vPvB (Article 57e)                                                                              | It can be used as flame retardants, plasticising additives in plastics, sealants, rubber and textiles.                                                                      |
|  | 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                                              | —         | —          | Toxic for reproduction (Article 57c)<br>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. |





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|                |     | individual isomers and/ or combinations thereof (PDDP)                                                                                                                                                   |           |           |                                         |                                                                                                                                                                                                                |
| 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, dioctyl-, bis(cocoacyloxy) derivs., and any other stannane, dioctyl-, bis(fattyacyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety | —         | —         | Toxic for reproduction (Article 57 (c)) | It can be used as stabilizer and catalyst for plastics, textiles and leather.                                                                                                                                  |
| 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                                                                           |





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|                       | 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.                                                                |
| <b>The 22st batch</b> | 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)<br>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.<br>Potassium of Perfluorobutane sulfonic acid are used as flame retardants in polycarbonate mainly in electrical and electronic equipment. |





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|                       | 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.). |
| <b>The 21st batch</b> | 201 | 2-methoxyethyl acetate                                                                                                                                       | 203-772-9 | 110-49-6   | Toxic for reproduction (Article 57 (c))                                                                                                                                                                                    | Not registered under REACH.                                                                           |
|                       | 200 | Tris(4-nonylphenyl, branched and linear) phosphite (TNPP)                                                                                                    | -         | -          | 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)<br>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.    |





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| The<br>20th<br>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)<br>PBT (Article 57d)<br>vPvB (Article 57e) | Widely used in coatings, adhesives etc.                                                                                               |
|                      | 195 | Fluoranthene                                                  | 205-912-4 | 206-44-0   | PBT (Article 57d)<br>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)<br>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<br>19th<br>batch | 191 | Octamethylcyclotetrasiloxane (D4)                             | 209-136-7 | 556-67-2   | PBT (Article 57d)<br>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)<br>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)<br>vPvB (Article 57e)                               | Used in washing and cleaning products, polishes and waxes, cosmetics and personal care                                                |





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|     |                                                                              |           |            |                                                                   |                                                                                                                                           | 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)<br>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-tricarboxylic 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.                                                                                           |           |





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|                       | 182 | Dicyclohexyl phthalate (DCHP)                                                                      | 201-545-9 | 84-61-7                                    | Toxic for reproduction (Article 57c)<br>Endocrine disrupting properties (Article 57(f) - human health) | Used in plastisol, PVC, rubber and plastic articles. A further use is also as a phlegmatizer and dispersing agent for formulations of organic peroxides. |
| <b>The 18th batch</b> | 181 | Dechlorane plus (including any of its individual anti- and syn-isomers or any combination thereof) | -         | 13560-89-9;<br>135821-74-8;<br>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<br>PBT<br>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<br>Toxic                                                                                  | For the manufacture of glass, porcelain and ceramic products                                                                                             |
|                       | 178 | Cadmium carbonate                                                                                  | 208-168-9 | 513-78-0                                   | Carcinogenic<br>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<br>Toxic                                                                                  | Used in laboratory chemicals and for the manufacture of electrical, electronic and optical equipment.                                                    |





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|                       | 176 | Chrysene                                                                                                                                                                              | 205-923-4 | 218-01-9 | Carcinogenic<br>PBT<br>vPvB | Normally not produced intentionally but rather occurs as a constituent or impurity in other substances.                                                                                                  |
|                       | 175 | Reaction products of<br>1,3,4-thiadiazolidine-2,5-dithione,<br>formaldehyde and<br>4-heptylphenol, branched and linear (RP-HP)<br>[with≥0.1% w/w 4-heptylphenol, branched and linear] | -         | -        | Endocrine disruption        | Used as a lubricant additive in lubricants and greases.                                                                                                                                                  |
| <b>The 17th batch</b> | 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. |





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| The<br>16th<br>batch | 173 | 4,4'-isopropylidenedi phenol (bisphenol A; BPA)                                                                                                                     | 201-245-8                   | 80-05-7                            | Toxic for reproduction (Article 57c)<br>Endocrine disrupting properties (Article 57(f) - environment)<br>Endocrine disrupting properties (Article 57(f) - human health) | Manufacture of polycarbonate, epoxy resins and chemicals; hardener in epoxy resins |
|                      | 172 | Nonadecafluorod ecanoic acid (PFDA) and its sodium and ammonium salts                                                                                               | 206-400-3<br>-<br>221-470-5 | 335-76-2<br>3830-45-3<br>3108-42-7 | Toxic for reproduction (Article 57c)<br>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 alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to | -                           | -                                  | Equivalent level of concern having probable serious effects to environment (Article 57f)                                                                                | Manufacture of polymers; formulation into lubricants                               |





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|                       |     | phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] |               |                |                                                                                                                                                        |                                                                                                                                                                                                                        |
| <b>The 15th batch</b> | 169 | Benzo[def]chryse<br>ne                                                                                                        | 200-028-<br>5 | 50-32-8        | Carcinogenic<br>(Article 57a)<br>Mutagenic (Article<br>57b)<br>Toxic for<br>reproduction<br>(Article 57c)<br>PBT (Article 57 d)<br>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. |
| <b>The 14th batch</b> | 168 | Nitrobenzene                                                                                                                  | 202-716-<br>0 | 98-95-3        | Toxic for<br>reproduction<br>(Article 57 c)                                                                                                            | Manufacture of other substances                                                                                                                                                                                        |
|                       | 167 | 2,4-di-tert-butyl-<br>6-(5-chlorobenzo<br>triazol-2-yl)phen<br>ol (UV-327)                                                    | 223-383-<br>8 | 3864-99-<br>1  | vPvB (Article 57 e)                                                                                                                                    | UV-protection agents in coatings, plastics, rubber and cosmetics                                                                                                                                                       |
|                       | 166 | 2-(2H-benzotriaz<br>ol-2-yl)-4-(tert-b<br>utyl)-6-(sec-butyl<br>)phenol (UV-350)                                              | 253-037-<br>1 | 36437-37<br>-3 | vPvB (Article 57 e)                                                                                                                                    | UV-protection agents in coatings, plastics, rubber and cosmetics                                                                                                                                                       |
|                       | 165 | 1,3-propanesulto<br>ne                                                                                                        | 214-317-<br>9 | 1120-71-<br>4  | Carcinogenic<br>(Article 57 a)                                                                                                                         | Electrolyte fluid of lithium ion batteries                                                                                                                                                                             |





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|                | 164 | Perfluorononan-1-oic-acid and its sodium and ammonium salts                                                                                                                         | 206-801-3              | 375-95-1<br>21049-39-8<br>4149-60-4 | Toxic for reproduction<br>(Article 57 c)<br>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;<br>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<br>272-013-1 | 68515-51-5<br>68648-93-1            | Toxic for reproduction<br>(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],<br>5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual | /                      | /                                   | 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.                                                                                |





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|                |     | 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);<br>Mutagenic (Article 57 b);<br>Toxic for reproduction (Article 57 c);<br>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;<br>31119-53-6 | Carcinogenic (Article 57 a);<br>Mutagenic (Article 57 b);<br>Toxic for reproduction (Article 57 c);<br>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-butylphenol (UV-320)     | 223-346-6 | 3846-71-7                 | PBT (Article 57 d);<br>vPvB (Article 57 e)                                                                                                                                                        | Used as plastic additive, ultraviolet light absorber and light stabilizer |
|                | 158 | 2-(2H-benzotriazol-2-yl)-4,6-ditert-pentylphenol         | 247-384-8 | 25973-55-1                | PBT (Article 57 d);<br>vPvB (Article 57 e)                                                                                                                                                        | Used as plastic additive, ultraviolet light absorber and light stabilizer |





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|                               |     | (UV-328)                                                                                                                                                                                                                                                                                                           |               |                |                                                                                                                                                                           |                                                      |
|                               | 157 | 2-ethylhexyl<br>10-ethyl-4,4-dioct<br>yl-7-oxo-8-oxa-3,<br>5-dithia-4-stanna<br>tetradecanoate<br>(DOTE)                                                                                                                                                                                                           | 239-622-<br>4 | 15571-58<br>-1 | Toxic for<br>reproduction<br>(Article 57 c)                                                                                                                               | Used as a stabiliser for PVC<br>processing           |
|                               | 156 | Reaction mass of<br>2-ethylhexyl<br>10-ethyl-4,4-dioct<br>yl-7-oxo-8-oxa-3,<br>5-dithia-4-stanna<br>tetradecanoate<br>and 2-ethylhexyl<br>10-ethyl-4-[[2-[(2<br>-ethylhexyl)oxy]-<br>2-oxoethyl]thio]-4<br>-octyl-7-oxo-8-ox<br>a-3,5-dithia-4-sta<br>nnatetradecanoat<br>e (reaction mass<br>of DOTE and<br>MOTE) | -             | -              | Toxic for<br>reproduction<br>(Article 57 c)                                                                                                                               | Used as a stabiliser for PVC<br>processing           |
| <b>The<br/>11th<br/>batch</b> | 155 | Cadmium<br>chloride                                                                                                                                                                                                                                                                                                | 233-296-<br>7 | 10108-64<br>-2 | Carcinogenic<br>(Article 57a);<br>Mutagenic (Article<br>57b);<br>Toxic for<br>reproduction<br>(Article 57c);<br>Equivalent level of<br>concern having<br>probable serious | used for photocopying, dyeing<br>and electroplating. |





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|                       |     |                                                                                   |            |            | effects to human health (Article 57 f)                                                                                 |                                                                                                                                         |
|                       | 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                                                                                                            |
| <b>The 10th batch</b> | 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'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphon | 209-358-4  | 573-58-0   | Carcinogenic(Article 57a)                                                                                              | used to stain microscopic preparates, especially as a cytoplasm and erythrocyte stain;                                                  |





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|  |     | ate) (C.I. Direct Red 28)                                                                                                                           |           |            |                                       |                                                                                                                                                                                                                                            |
|  | 149 | Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulfonate (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 (Article 57 c) | Used as flame-retardants and plasticizers                                                                                                                                                                                                  |





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





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|                      | 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. |
| <b>The 8th batch</b> | 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 | Pentacosfluorotridecanoic 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                                                                                                                                                              |





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|  | 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<br>Cyclohexane-1,2-dicarboxylic anhydride [1]<br>cis-cyclohexane-1,2-dicarboxylic anhydride [2]<br>trans-cyclohexane-1,2-dicarboxylic anhydride [3]<br>The individual cis- [2] and trans- [3] | 201-604-9,<br>236-086-3,<br>238-009-9               | 85-42-7,<br>13149-00-3,<br>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],<br>Hexahydro-4-methylphthalic anhydride[2],<br>Hexahydro-1-methylphthalic anhydride[3],<br>Hexahydro-3-methylphthalic anhydride [4]                                                            | 247-094-1,<br>243-072-0,<br>256-356-4,<br>260-566-1 | 25550-51-0,<br>19438-60-9,<br>48122-14-1,<br>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 |





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|               |     | [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                                                                                   |





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|     |  | 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                                                                                                                               |





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|                      |     |                                   |           |            |                                          | industry, and intermediate raw material of lead salt industry                                                                                                                                                                          |
| <b>The 8th batch</b> | 124 | Orange lead<br>(Lead tetroxide)   | 215-235-6 | 1314-41-6  | Toxic for reproduction<br>(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<br>(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<br>(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<br>(Article 57 c) | Used for manufacturing complex electronic ceramics such as the BaTiO <sub>3</sub> -PbTiO <sub>3</sub> and PbZrO <sub>3</sub> -PbTiO <sub>3</sub> , 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<br>(Article 57 c) | Used for manufacturing complex electronic ceramics to improve the electrical properties of ceramics. Also                                                                                                                              |





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|  |     |                                                                                                                                                                                                                                                                                                                                                             |           |            |                                       | 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 <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] | 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                                             |





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





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|  | 112 | 1,2-diethoxyethane              | 211-076-1 | 629-14-1   | Toxic for reproduction<br>(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<br>(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<br>(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<br>(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<br>(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<br>(Article 57 c) | Used in manufacture of paint, printing ink                                                                                                                                                                                                         |
|  | 106 | Lead cyanamdate                 | 244-073-9 | 20837-86-9 | Toxic for reproduction<br>(Article 57 c) | Mainly used in plating (both electrolytic and electroless) processes for electronic components (such as printed circuit boards).                                                                                                                   |





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| The<br>8th<br>batch | 105 | Lead dinitrate                     | 233-245-9 | 10099-74-8 | Toxic for reproduction<br>(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<br>(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<br>(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<br>(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<br>(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<br>(Article 57 c) | Used as a PVC stabilizer; having harmonized effects used with dibasic lead phosphate.                                                                                                                                                                                                          |





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|                      | 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                        |
| <b>The 8th batch</b> | 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                                                                                                                                                                                                                                                                                 |





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|  |    | -1,3-oxazolidine                                     |           |          | (Article 57 c)                                            | pesticide intermediates                                                                                                                                                                |
|  | 94 | Dinoseb<br>(6-sec-butyl-2,4-dinitrophenol)           | 201-861-7 | 88-85-7  | Toxic for reproduction<br>(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<br>(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<br>(Article 57a);<br>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<br>(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<br>(toluene-2,4-diamine) | 202-453-1 | 95-80-7  | Carcinogenic<br>(Article 57a)                             | TDI, sulfur dyes, basic dyes, disperse dyes, pharmaceutical intermediates and other organic synthesis                                                                                  |
|  | 89 | 6-methoxy-m-toluidine<br>(p-cresidine)               | 204-419-1 | 120-71-8 | Carcinogenic<br>(Article 57a)                             | Suitable for direct, disperse, reactive dyes Synthesis                                                                                                                                 |
|  | 88 | Biphenyl-4-ylamine                                   | 202-177-1 | 92-67-1  | Carcinogenic<br>(Article 57a)                             | Dye and pesticide intermediates; also used for manufacturing scintillatort paraterphenyl; manufacturing dyes; Cancer Research; organic synthesis;                                      |





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|                      | 87 | o-aminoazotoluene<br>[(4-o-tolylazo-o-toluidine)]           | 202-591-2 | 97-56-3   | Carcinogenic<br>(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<br>(Article 57a)            | Use as dye intermediates, organic synthesis and synthesis of saccharin                                                                                                                                                                                    |
|                      | 85 | N-methylacetamide                                           | 201-182-6 | 79-16-3   | Toxic for reproduction<br>(Article 57 c) | pharmaceutical industry, catalyst, deacidifying agent                                                                                                                                                                                                     |
| <b>The 7th batch</b> | 84 | 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)           | 203-977-3 | 112-49-2  | Toxic for reproduction<br>(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<br>(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<br>(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. |





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|  | 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 | $\beta$ -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. |





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|                      | 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 (photosensitiser) in dyes and pigments, in dry film products, as a process chemical in the production of electronic circuit boards, in research and development applications. |
| <b>The 7th batch</b> | 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.                                                                                  |





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





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





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|  | 59 | Calcium arsenate                             | 231-904-5 | 7778-44-1  | Art. 57 (a),<br>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),<br>carcinogenic                                     | mainly used as curing agent in resins and to produce polymer articles                                                                                                                        |
|  | 55 | Phenolphthalein                              | 201-004-7 | 77-09-8    | Art. 57 (a),<br>carcinogenic                                     | used as laboratory agent (in pH indicator solutions), to produce pH-indicator paper and in medicinal products                                                                                |
|  | 54 | Lead diazide,<br>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. |





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|               | 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<br>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                                               |





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|  |    |                                                                             |           |            |                                                          | 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.                                                                                                                                                          |





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





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|               | 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<br>236-881-5 | 7738-94-5<br>13530-68-2  | Carcinogenic (article 57a)                          | These acids and their oligomers are generated when chromium trioxide is dissolved in water.<br><br>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"> <li>· Cleaning and degreasing of metal parts</li> <li>· Solvent in adhesives</li> <li>· Intermediate in the manufacture of chlorinated and fluorinated organic compounds</li> </ul>                                                                              |
|               | 35 | Boric acid                                                 | 233-139-2<br>234-343-4 | 10043-35-3<br>11113-50-1 | Toxic for reproduction category 2                   | <ul style="list-style-type: none"> <li>· 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</li> </ul> |





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|                      |    |                                         |           |                                      |                                                                                        | developers.                                                                                                                                                                                                             |
|                      | 34 | Disodium tetraborate, anhydrous         | 215-540-4 | 1330-43-4<br>12179-04-3<br>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. |
| <b>The 3rd batch</b> | 32 | Sodium chromate                         | 231-889-5 | 7775-11-3                            | Carcinogenic category 2;<br>mutagenic category 2;<br>toxic for reproduction category 2 | <ul style="list-style-type: none"> <li>· Laboratory (analytical agent)</li> <li>· Manufacture of other chromium compounds</li> </ul>                                                                                    |
|                      | 31 | Potassium chromate                      | 232-140-5 | 7789-00-6                            | Carcinogenic category 2;<br>mutagenic category 2                                       | <ul style="list-style-type: none"> <li>· Treatment and coating of metals</li> <li>· Manufacture of reagents and chemicals</li> <li>· Manufacture of textiles</li> <li>· Colouring agent in ceramics</li> </ul>          |





|                      |    |                      |           |            |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|                      |    |                      |           |            |                                                                                  | <ul style="list-style-type: none"> <li>· Tanning and dressing of leather</li> <li>· Manufacture of pigments/inks</li> <li>· Laboratory (analytical reagent)</li> <li>· Pyrotechnics</li> </ul>                                                                                                                                                                                                                                           |
|                      | 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"> <li>· Oxidising agent</li> <li>· Laboratory (analytical agent)</li> <li>· Tanning of leather</li> <li>· Manufacture of textiles</li> <li>· Manufacture of photosensitive screens (cathode ray tubes)</li> <li>· Metal treatment</li> </ul>                                                                                                                                                            |
|                      | 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"> <li>· Chrome metal manufacturing</li> <li>· Treatment and coating of metals</li> <li>· Manufacture of reagents and chemicals</li> <li>· Laboratory (analytical agent)</li> <li>· Cleaning of laboratory glassware</li> <li>· Tanning of leather</li> <li>· Manufacture of textiles</li> <li>· Photolithography</li> <li>· Wood treatment</li> <li>· Corrosion inhibitor in cooling systems</li> </ul> |
| <b>The 2nd batch</b> | 28 | Anthracene oil       | 292-602-7 | 90640-80-5 | Art. 57 (c), toxic for reproduction                                              | Seal coating, anti-corrosion oil, pesticides, materials of anthraquinone                                                                                                                                                                                                                                                                                                                                                                 |





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





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|----------------------|----|------------------------------------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
|                      | 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                           |
| <b>The 1st batch</b> | 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                |





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|  | 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 &amp; 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)<br>Endocrine                              | Commonly used plasticizers for plastics, rubber, etc.                                                                                                                                                                                                                                                                                                                                                                                                                               |





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|--|---|-------------------------------------------------------------|------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  |   |                                                             |                        |                                                                          | disrupting properties (Article 57(f) - environment)<br>Endocrine disrupting properties (Article 57(f) - human health) |                                                                                    |
|  | 5 | Hexabromocyclo dodecane                                     | 247-148-4<br>221-695-9 | 25637-99-4,<br>3194-55-6,<br>134237-50-6,<br>134237-51-7,<br>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)<br>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)<br>Toxic for reproduction (Article 57c)                                                    | pesticides                                                                         |





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

