

**APPENDIX A: Table of Restricted Substances**  
(as of 23 January 2024 rev 26)

**I. General Restrictions**

The following substances shall be restricted or not be used for Class A and Class B:  
Class A:

| Substance or compound                                                                                                              | Directive/<br>Legislation                                                      | Maximum concentration value (ppm)<br>by weight in homogenous material to<br>impurities and residues |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Lead and its Compounds                                                                                                             | RoHS/2011/65/EC<br>WEEE/2012/19/EC<br>91/338/EEC<br>83/264/EEC &<br>76/769/EEC | 1000ppm                                                                                             |
| Cadmium and its Compounds                                                                                                          |                                                                                | 75 ppm                                                                                              |
| Hexavalent Chromium and its Compounds                                                                                              |                                                                                | 1000ppm                                                                                             |
| Mercury and its Compounds                                                                                                          |                                                                                | 1000ppm                                                                                             |
| Polybrominated biphenyls (PBBs)                                                                                                    |                                                                                | 1000ppm                                                                                             |
| Polybrominated diphenylethers (PBDEs)<br>(including DecaBDE)                                                                       | SJ/T 11363-2006                                                                | 1000ppm                                                                                             |
| Bis(2-ethylhexyl) phthalate (DEHP),<br>Butyl benzyl phthalate (BBP),<br>Dibutyl phthalate (DBP) and<br>Diisobutyl phthalate (DIBP) | RoHS II<br>2015/863/EU<br>(Effective on 22 <sup>nd</sup> July<br>2019)         | 1000ppm                                                                                             |

Class B:

| Substance or compound                                              | Directive/Legislation                                                       | Maximum concentration value<br>(ppm) by weight in homogenous<br>material to impurities and residues |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Asbestos                                                           | WEEE + 76/769/EEC &<br>83/478/EEC & 85/610/EEC<br>& 91/659/EEC, general ban | 1000ppm                                                                                             |
| Azo Compounds                                                      | 2002/61/EC<br>76/769/EEC                                                    | 30ppm; if continuous skin contact                                                                   |
| Ozone Depleting Substances (ODSs)                                  | 3093/94 + WEEE,<br>2037/2000; General ban                                   | Class 1: 0ppm<br>Class 2: 1000ppm                                                                   |
| Polychlorinated Biphenyls (PCBs) and<br>Terphenyls (PCTs)          | 76/769/EEC & 82/828/EEC<br>& 85/467/EEC &<br>89/677/EEC General ban         | 50ppm                                                                                               |
| Polychlorinated Naphthalenes (more<br>than 3 chlorine atoms)       | Other countries:<br>Swiss CH StoV Anh.3,1<br>German and Japan Laws          | 0ppm                                                                                                |
| Shortchain Chlorinated Paraffins                                   | 2002/45/EC, 76/769/EEC                                                      | 1000ppm                                                                                             |
| Tributyl Tin (TBT) and Tributyl Tin<br>Oxide (TBTO)                | EU 89/677/EEC, 99/51/EC,<br>76/769/EEC; Japan Law;<br>PoHS Norway Law       | 100ppm                                                                                              |
| Triphenyl Tin (TPT)                                                |                                                                             |                                                                                                     |
| Certain Phthalates (Refer Appendix A)                              | 2005/84/EC; EU REACH                                                        | 1000ppm                                                                                             |
| Perfluorooctane Sulfonates (PFOS)<br>Perfluorooctanoic Acid (PFOA) | 76/769/EEC                                                                  | 25ppb                                                                                               |

## A) Country/Regional/Customer Restrictions

The following substances shall be restricted for those substances listed per Effective Date in table below.

| Substance or compound                                                                                                                                                       | Legislation/Customer Requirement                                                                                                               | Legislation / Customer Threshold Limit | Effective Date                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------|
| Polycyclic Aromatic Hydrocarbons (PAH)                                                                                                                                      | Germany Law                                                                                                                                    | 10ppm                                  | Immediate                                     |
| Hexabromocyclododecane (HBCDD)                                                                                                                                              | PoHS Norway Law / EU REACH                                                                                                                     | 1000ppm                                | Immediate                                     |
| Tetrabromobisphenol A (TBBPA)                                                                                                                                               | PoHS Norway Law                                                                                                                                | 1000ppm                                | To be determine                               |
| Arsenic and arsenic compounds                                                                                                                                               | PoHS Norway Law                                                                                                                                | 100ppm                                 | To be determine                               |
| Musk xylene & Musk ketone                                                                                                                                                   | PoHS Norway Law / EU REACH                                                                                                                     | 500ppm                                 | Immediate                                     |
| Bisphenol A                                                                                                                                                                 | PoHS Norway Law/ EU REACH                                                                                                                      | 50ppm                                  | To be determine                               |
| Pentacholorphenol                                                                                                                                                           | PoHS Norway Law                                                                                                                                | 1000ppm                                | To be determine                               |
| Triclosan                                                                                                                                                                   | PoHS Norway Law                                                                                                                                | 1ppm                                   | To be determine                               |
| Bromine                                                                                                                                                                     | Customer Requirement, IEC 61249-2-21                                                                                                           | 900ppm                                 | Restriction per specific Customer Requirement |
| Chlorine                                                                                                                                                                    | Customer Requirement, IEC 61249-2-21                                                                                                           | 900ppm                                 | Restriction per specific Customer Requirement |
| Total of Bromine & Chlorine                                                                                                                                                 | Customer Requirement, IEC 61249-2-21                                                                                                           | 1500ppm                                | Restriction per specific Customer Requirement |
| Polyvinyl Chloride (PVC) and PVC blends                                                                                                                                     | Customer Requirement                                                                                                                           | 0ppm                                   | Immediate                                     |
| Hydrochlorofluorocarbon (HCFC) Hydrofluorocarbon (HFC) , Perfluorocarbon (PFC), Sulfur Hexafluoride (SF6)                                                                   | Customer Requirement<br>EC/842/2006<br>Denmark: Statutory Order No.552<br>Switzerland(ORRChem)                                                 | 0ppm                                   | Immediate                                     |
| Specific Benzotriazole (Refer to Appendix A)                                                                                                                                | Customer Requirement                                                                                                                           | 0ppm                                   | Immediate                                     |
| Specified organic tin compounds (Tributyl, Triphenyl, Tricyclohexyl, Triethyl, Trihexyl, Trimethyl, Trioctyl tin compounds) & Other tri-substituted organostannic compounds | Customer Requirement,<br>U 89/677//, 99/51/EC,<br>76/769/EEC, Japan law. POHS<br>Norway law                                                    | 100ppm                                 | Immediate                                     |
| Azo dies and pigments forming specified amines                                                                                                                              | Customer Requirement                                                                                                                           | 30ppm                                  | Immediate                                     |
| Specific Amine Compounds (N-N'-diloril-p-phenylene diamine, 2-naphthylamine, 4-aminodiphenyl, Benzidine)                                                                    | Customer Requirement                                                                                                                           | 1000ppm                                | Immediate                                     |
| Benzenamine, N-phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST)                                                                                    | "Prohibition of Certain Toxic Substances Regulations, 2012"<br>Canadian Environmental Protection Act, 1999 (Applicable to rubber & lubricants) | 0ppm                                   | Immediate                                     |

|                                                                                                                                 |                                                                                                                                                                                                                                                                                                            |                                                             |                                     |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------|
| Cadmium and its Compounds                                                                                                       | Customer Requirement                                                                                                                                                                                                                                                                                       | 50ppm                                                       | Immediate                           |
| Hexavalent Chromium and its Compounds                                                                                           | Customer Requirement                                                                                                                                                                                                                                                                                       | 500ppm                                                      | Immediate                           |
| Radioactive Substances (Refer to Appendix A)                                                                                    | General Banned                                                                                                                                                                                                                                                                                             | 0ppm                                                        | Immediate                           |
| Phenol, isopropylated phosphate (3:1) (PIP (3:1))                                                                               | US Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h)                                                                                                                                                                                                                  | 0ppm                                                        | Immediate                           |
| Decabromodiphenyl ether (decaBDE)                                                                                               |                                                                                                                                                                                                                                                                                                            | 0ppm                                                        | Immediate                           |
| 2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)                                                                                       |                                                                                                                                                                                                                                                                                                            | 0.3%                                                        | Immediate                           |
| Hexachlorobutadiene (HCBD)                                                                                                      |                                                                                                                                                                                                                                                                                                            | 0ppm                                                        | Immediate                           |
| Pentachlorothiophenol (PCTP)                                                                                                    |                                                                                                                                                                                                                                                                                                            | 1%                                                          | Immediate                           |
| Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and their related substances | EU REACH (EC) No 1907/2006 Restrictions (Annex XVII)                                                                                                                                                                                                                                                       | C9-C14 PFCAs & Salts < 25 ppb, Related substances < 260 ppb | From 31 <sup>st</sup> December 2023 |
| Per- and Polyfluoroalkyl Substances (PFAS)                                                                                      | <ul style="list-style-type: none"> <li>- EU REACH Restriction (Annex XV) Proposal on PFAS</li> <li>- Maine, US - An Act To Stop PFAS pollution (LD 1503, 130th Legislature)</li> <li>- EPA Toxic Substances Control Act (TSCA) Section 8(a)(7) Reporting and Recordkeeping Requirements of PFAS</li> </ul> | 25 ppb for non-polymeric PFAS<br>50 ppm for polymeric PFAS  | Reportable substances               |

## B) Specific Applications

The following substances shall only be restricted for those applications listed in the table below.

| Substances                | Restricted Application                                                                                                          | Directive/Legislation                               | Maximum concentration value (ppm) by weight |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------|
| Cadmium and its compounds | Dyes, Pigments, paints/enamels (excepting safety warnings), Plastic Stabilizer (electric cables), anti-corrosion coating finish | EU 91/338/EEC<br>76/769/EEC                         | 50 ppm                                      |
|                           | Other Uses (excluding optical glass and switch contacts)                                                                        |                                                     | 0 ppm                                       |
| Lead and its compounds    | Paints                                                                                                                          | 89/677/EEC<br>91/157/EEC<br>94/62/EEC<br>2000/53/EC | 0 ppm                                       |
|                           | Used as PVC stabilizer in cable jackets                                                                                         | 89/677/EEC<br>91/157/EEC<br>94/62/EEC<br>2000/53/EC | 0.03% (300 ppm)                             |

|                                                                                                                                                                                                                                                                                                                           |                                                                                                     |                                                                                       |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------|
| Mercury and its compounds                                                                                                                                                                                                                                                                                                 | Lamps including LCDs (see also Labeling Requirements sect.10.1)                                     | 89/667/EEC<br>94/62/EEC<br>98/101/EC<br>2000/53/EC<br>2001-H6161A                     | 10 mg/lamp      |
|                                                                                                                                                                                                                                                                                                                           | Other Uses (excluding lamps and LCDs)                                                               | 91/157/EEC &<br>93/86/EEC 98/101/EC                                                   | 0 ppm           |
| Short chain chlorinated paraffins                                                                                                                                                                                                                                                                                         | Softener in paints & coatings, oils, or flame retardant in plastic, rubber or textiles              | 2000/60/EC<br>2002/45/EC                                                              | 0.1% (1000 ppm) |
| Formaldehyde                                                                                                                                                                                                                                                                                                              | Wooden materials, furniture, detergents, cleaning agents and polishes                               | Germany: ChemverbotsV<br>Denmark: Statutory Order 289<br>USA:CA prop65                | 0ppm            |
| Dimethyl fumarate (DMF)                                                                                                                                                                                                                                                                                                   | Biocide for Wood treatment.                                                                         | EU Commission Decision 2009/251                                                       | 0ppm            |
| Cobalt dichloride                                                                                                                                                                                                                                                                                                         | Moisture indicator used for desiccant agent (Eg.Silica gel, humidity indicator card)                | 1907/2006/EC Annex XVII<br>EU REACH                                                   | 0ppm            |
| <ul style="list-style-type: none"> <li>- Benzene</li> <li>- n-hexane</li> <li>- Chlorinated organic solvents (or total chlorine)</li> <li>- N-Methylpyrrolidone (NMP)</li> <li>- N-Propyl Bromide(nPB)</li> <li>- Toluene</li> </ul>                                                                                      | Cleaning agents and degreasers used in final assembly manufacturing                                 | Customer requirement                                                                  | 0ppm            |
| <ul style="list-style-type: none"> <li>- Tris(1-chloro-2-propyl) phosphate (TCPP) [CAS#13674-84-5]</li> <li>- Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) [CAS#13674-87-8]</li> </ul>                                                                                                                                   | Chlorinated flame retardants                                                                        | Customer requirement<br>United States.<br>Vermont State Act. 85                       | 1000ppm         |
| <ul style="list-style-type: none"> <li>- Nickel and Nickel compound</li> <li>- Beryllium Oxide</li> </ul>                                                                                                                                                                                                                 | External surface where prolonged skin contact is expected                                           | Customer requirement                                                                  | 1000ppm         |
| Perchlorate Compounds                                                                                                                                                                                                                                                                                                     | Lithium perchlorate coin cell batteries                                                             | Customer requirement                                                                  | 0.1ppm          |
| Volatile Organic Compounds (VOCs)                                                                                                                                                                                                                                                                                         | VOC content and substance restrictions for paints, coatings, inks, adhesives, primers, and cleaners | Countries regulations i.e. GB30981 -2020, GB 33372-2020, GB 38508-2020, GB 38507-2020 | 0ppm            |
| Ethylene-Based Glycol Ethers<br><ul style="list-style-type: none"> <li>- 2-Methoxyethanol [CAS#109-86-4]</li> <li>- 2-Ethoxyethanol [CAS#110-80-5]</li> <li>- 2-Methoxyethyl Acetate [CAS#110-49-6]</li> <li>- 2-Ethoxyethyl Acetate [CAS#111-15-9]</li> <li>- Diethylene Glycol Dimethyl Ether [CAS#111-96-9]</li> </ul> | Banned to use in final assembly manufacturing processes.                                            | Customer requirement<br>EU REACH<br>Toxic Substances Control Act (TSCA)               | 0ppm            |

### C) Battery Content Restrictions

The following substances are prohibited for use in batteries.

| Substance         | Applicable Batteries                                             | Threshold (Not to Exceed) |
|-------------------|------------------------------------------------------------------|---------------------------|
| Mercury           | Alkaline-manganese or Zinc-carbon batteries (except button cell) | 0 ppm                     |
|                   | All others except button cell                                    | 5 ppm                     |
|                   | Button cell                                                      | 2% by weight              |
| Mercury Compounds | Mercuric Oxide batteries                                         | Not to be used            |
| Cadmium           | Alkaline-manganese or Zinc-carbon batteries                      | 10 ppm by weight          |

### D) Packaging Content Restrictions

The following substances are prohibited for use in packaging materials purchased by Broadcom and used to package the products Broadcom sells.

| Substance                                      | Restricted Application                                                                             | Directive/Legislations                                                           | Threshold (Not to Exceed)                     |
|------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------|
| Ozone depleting substances CFCs, HFCs and PFCs | Foams                                                                                              | General ban                                                                      | 0 ppm                                         |
| Cadmium, Chromium (VI), Lead and Mercury       | Packaging Material/ Inks                                                                           | EU 94/62/EEC                                                                     | 100 ppm (total)                               |
| Cadmium compounds                              | Printing Inks, dyes, pigments, stabilizer in PVC                                                   | Restriction only apply per specific Customer Requirement                         | 5 ppm                                         |
| Polyvinyl Chloride (PVC) and PVC blends        | Packaging Material Insulator, transparency, sheath material, tamper-proof labels, clam-shell packs | Restriction only apply per specific Customer Requirement, JIG101 and JIG201(Pkg) | 1000 ppm per pkg item                         |
| REACH-SVHC Substances                          | Packaging Material                                                                                 | EC 1907/2006                                                                     | 1000ppm                                       |
| Azo dyes and pigments forming specified amines | Packaging/Printing inks                                                                            | Restriction only apply per specific Customer Requirement, JIG 201(pkg)           | 30ppm/<5 ppm                                  |
| Formaldehyde                                   | Wood Materials, furniture, detergents, cleaning agents                                             | Germany, Chemverbots V<br>Denmark, Statutory Order 289<br>USA CA: Prop 65        | 0 ppm                                         |
| Beryllium Oxide                                | WEEE 2002/96/EC<br>EU 1999/45/EC<br>DIGITALEUROPE 3/CECED/<br>AeA 4/ EERA guidance                 | 0ppm                                                                             | Restriction per specific Customer Requirement |

## E) REACH -Substances of Very High Concern (SVHC)

The following substances are latest SVHC (240) substances (As of 23 Jan 2024)

|    | SVHC Substances                                                                                                                                                 | CAS Number                                                   | EINECS Number        | Threshold Limit (PPM) by weight |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------|---------------------------------|
| 1  | Anthracene                                                                                                                                                      | 120-12-7                                                     | 204-371-1            | 1000 PPM                        |
| 2  | 4,4'- Diaminodiphenylmethane                                                                                                                                    | 101-77-9                                                     | 202-974-4            |                                 |
| 3  | Dibutyl phthalate (DBP)                                                                                                                                         | 84-74-2                                                      | 201-557-4            |                                 |
| 4  | Cobalt dichloride                                                                                                                                               | 7646-79-9                                                    | 231-589-4            |                                 |
| 5  | Diarsenic pentaoxide                                                                                                                                            | 1303-28-2                                                    | 215-116-9            |                                 |
| 6  | Diarsenic trioxide                                                                                                                                              | 1327-53-3                                                    | 215-481-4            |                                 |
| 7  | Sodium dichromate dehydrate                                                                                                                                     | 7789-12-0                                                    | 234-190-3            |                                 |
| 8  | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)                                                                                                              | 81-15-2                                                      | 201-329-4            |                                 |
| 9  | Bis (2-ethyl(hexyl)phthalate) (DEHP)                                                                                                                            | 117-81-7                                                     | 204-211-0            |                                 |
| 10 | Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane | 25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8 | 247-148-4, 221-695-9 |                                 |
| 11 | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)                                                                                                     | 85535-84-8                                                   | 287-476-5            |                                 |
| 12 | Bis(tributyltin) oxide (TBTO)                                                                                                                                   | 56-35-9                                                      | 200-268-0            |                                 |
| 13 | Lead hydrogen arsenate                                                                                                                                          | 7784-40-9                                                    | 232-064-2            |                                 |
| 14 | Triethyl arsenate                                                                                                                                               | 15606-95-8                                                   | 201-622-7            |                                 |
| 15 | Benzyl butyl phthalate (BBP)                                                                                                                                    | 85-68-7                                                      | 427-700-2            |                                 |
| 16 | 2,4-Dinitrotoluene                                                                                                                                              | 121-14-2                                                     | 204-450-0            |                                 |
| 17 | Anthracene oil                                                                                                                                                  | 90640-80-5                                                   | 292-602-7            |                                 |
| 18 | Anthracene oil, anthracene paste, distn. Lights                                                                                                                 | 91995-17-4                                                   | 295-278-5            |                                 |
| 19 | Anthracene oil, anthracene paste, anthracene fraction                                                                                                           | 91995-15-2                                                   | 295-275-9            |                                 |
| 20 | Anthracene oil, anthracene-low                                                                                                                                  | 90640-82-7                                                   | 292-604-8            |                                 |
| 21 | Anthracene oil, anthracene paste                                                                                                                                | 90640-81-6                                                   | 292-603-2            |                                 |
| 22 | Diisobutyl phthalate                                                                                                                                            | 84-69-5                                                      | 201-553-2            |                                 |
| 23 | Aluminosilicate, Zirconia Aluminosilicate, Refractory Ceramic Fibres                                                                                            | -                                                            | (650-017-00-8*)      |                                 |
| 24 | Lead chromate                                                                                                                                                   | 7758-97-6                                                    | 231-846-0            |                                 |
| 25 | Lead chromate molybdate sulfate red (C.I. Pigment Red 104)                                                                                                      | 12656-85-8                                                   | 235-759-9            |                                 |
| 26 | Lead sulfochromate yellow (C.I. Pigment Yellow 34)                                                                                                              | 1344-37-2                                                    | 215-693-7            |                                 |
| 27 | Tris(2-chloroethyl)phosphate                                                                                                                                    | 115-96-8                                                     | 204-118-5            |                                 |
| 28 | Coal tar pitch, high temperature                                                                                                                                | 65996-93-2                                                   | 266-028-2            |                                 |
| 29 | Acrylamide                                                                                                                                                      | 79-06-1                                                      | 201-173-7            |                                 |
| 30 | Trichloroethylene                                                                                                                                               | 79-01-6                                                      | 201-167-4            |                                 |
| 31 | Boric acid                                                                                                                                                      | 10043-35-3; 11113-50-1                                       | 233-139-2; 234-343-4 |                                 |
| 32 | Disodium tetraborate, anhydrous                                                                                                                                 | 1303-96-4; 1330-43-4; 12179-04-3                             | 215-540-4            |                                 |
| 33 | Tetraboron disodium heptaoxide, hydrate                                                                                                                         | 12267-73-1                                                   | 235-541-3            |                                 |
| 34 | Sodium chromate                                                                                                                                                 | 7775-11-3                                                    | 231-889-5            |                                 |

|    |                                                                                                                          |                         |                        |          |
|----|--------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------|----------|
| 35 | Potassium chromate                                                                                                       | 7789-00-6               | 232-140-5              | 1000 ppm |
| 36 | Ammonium dichromate                                                                                                      | 7789-09-5               | 232-143-1              |          |
| 37 | Potassium dichromate                                                                                                     | 7778-50-9               | 231-906-6              |          |
| 38 | Cobalt(II) sulphate                                                                                                      | 10124-43-3              | 233-334-2              |          |
| 39 | Cobalt(II) dinitrate                                                                                                     | 10141-05-6              | 233-402-1              |          |
| 40 | Cobalt(II) carbonate                                                                                                     | 513-79-1                | 208-169-4,             |          |
| 41 | Cobalt(II) diacetate                                                                                                     | 71-48-7                 | 200-755-8              |          |
| 42 | 2-Methoxyethanol                                                                                                         | 109-86-4                | 203-713-7              |          |
| 43 | 2-Ethoxyethanol                                                                                                          | 110-80-5                | 203-804-1              |          |
| 44 | Chromium trioxide                                                                                                        | 1333-82-0               | 215-607-8              |          |
| 45 | Oligomers of Chromic acid, Dichromic acid                                                                                | 7738-94-5<br>13530-68-2 | 231-801-5<br>236-881-5 |          |
| 46 | 2-ethoxyethylacetate                                                                                                     | 111-15-9                | 203-839-2              |          |
| 47 | Strontium Chromate                                                                                                       | 7789-06-2               | 232-142-6              |          |
| 48 | Hydrazine                                                                                                                | 302-01-2                | 206-114-9              |          |
| 49 | 1-methyl-2-pyrrolidone                                                                                                   | 872-50-4                | 212-828-1              |          |
| 50 | 1,2,3-trichloropropane                                                                                                   | 98-18-4                 | 202-486-1              |          |
| 51 | 1,2-Benzenedicarboxylic, diC6-8-branched and alkyl esters, C7-rich (DIHP)                                                | 71888-89-6              | 276-158-1              |          |
| 52 | 1,2-benzenedicarboxylic, diC7-11-branched and linear alkyl esters (DHNUP)                                                | 68515-42-4              | 271-084-6              |          |
| 53 | Calcium arsenate                                                                                                         | 7778-44-1               | 231-904-5              |          |
| 54 | Bis(2-methoxyethyl) ether                                                                                                | 111-96-6                | 203-924-4              |          |
| 55 | Aluminosilicate Refractory Ceramic Fibres                                                                                | -                       | -                      |          |
| 56 | Potassium hydroxyoctaoxodizincatedichromate                                                                              | 11103-86-9              | 234-329-8              |          |
| 57 | Lead dipicrate                                                                                                           | 6477-64-1               | 229-335-2              |          |
| 58 | N,N-dimethylacetamide (DMAC)                                                                                             | 127-19-5                | 204-826-4              |          |
| 59 | Arsenic acid                                                                                                             | 7778-39-4               | 231-901-9              |          |
| 60 | 2-Methoxyaniline, 0-Anisidine                                                                                            | 90-04-0                 | 201-963-1              |          |
| 61 | Trilead diarsenate                                                                                                       | 3687-31-8               | 222-979-5              |          |
| 62 | 1,2-dichloroethane                                                                                                       | 107-06-2                | 203-458-1              |          |
| 63 | Pentazinc chromate octahydroxide                                                                                         | 49663-84-5              | 256-418-0              |          |
| 64 | 4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-Octylphenol)                                                                  | 140-66-9                | 205-426-2              |          |
| 65 | Formaldehyde, oligomeric reaction products with aniline                                                                  | 25214-70-4              | 500-036-1              |          |
| 66 | Bis(2-methoxyethyl) phthalate (DMEP)                                                                                     | 117-82-8                | 204-212-6              |          |
| 67 | Lead diazide, Lead azid                                                                                                  | 13424-46-9              | 236-542-1              |          |
| 68 | Lead styphnate                                                                                                           | 15245-44-0              | 239-290-0              |          |
| 69 | 2,2'-dichloro-4,4'-methylenedianiline (MOCA)                                                                             | 101-14-4                | 202-918-9              |          |
| 70 | Phenolphthalein                                                                                                          | 77-09-8                 | 201-004-7              |          |
| 71 | Dichromium tris(chromate)                                                                                                | 24613-89-6              | 246-356-2              |          |
| 72 | [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) | 548-62-9                | 208-953-6              |          |

|    |                                                                                                                                                                  |                                                         |                                                     |         |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|---------|
| 73 | a'-a'-Bis[4-(dimethylamino)phenyl]-4<br>(phenylamino)naphthalene-1-methanol (C.I. Solvent<br>Blue 4)                                                             | 6786-83-0                                               | 229-851-8                                           | 1000ppm |
| 74 | N,N,N',N'-tetramethyl-4,4'-methylenedianiline<br>(Michler's base)                                                                                                | 101-61-1                                                | 202-959-2                                           |         |
| 75 | 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-<br>triazine-2,4,6-(1H,3H,5H)-trione (Î²-TGIC)                                                                     | 59653-74-6                                              | 423-400-0                                           |         |
| 76 | Diboron trioxide                                                                                                                                                 | 1303-86-2                                               | 215-125-8                                           |         |
| 77 | 1,2-bis(2-methoxyethoxy)ethane (TEGDME triglme)                                                                                                                  | 112-49-2                                                | 203-977-3                                           |         |
| 78 | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl<br>alcohol                                                                                                       | 561-41-1                                                | 209-218-2                                           |         |
| 79 | Lead(II) bis(methanesulfonate)                                                                                                                                   | 17570-76-2                                              | 401-750-5                                           |         |
| 80 | Formamide                                                                                                                                                        | 75-12-7                                                 | 200-842-0                                           |         |
| 81 | 4-4'-anilino-1-naphthyl][4-<br>(dimethylamino)phenyl]methylene]cyclohexa-2,5-<br>dien-1-ylidene] dimethylammonium chloride (C.I.<br>Basic Blue 26)               | 2580-56-5                                               | 219-943-6                                           |         |
| 82 | 1,2-dimethoxyethane ethylene glycol dimethyl ether<br>(EGDME)                                                                                                    | 110-71-4                                                | 203-794-9                                           |         |
| 83 | 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-<br>trione (TGIC)                                                                                           | 2451-62-9                                               | 219-514-3                                           |         |
| 84 | 4,4'-bis(dimethylamino)benzophenone (Michler's<br>ketone)                                                                                                        | 90-94-8                                                 | 202-027-5                                           |         |
| 85 | Bis(pentabromophenyl) ether<br>(decabromodiphenyl ether; DecaBDE)                                                                                                | 1163-19-5                                               | 214-604-9                                           |         |
| 86 | Pentacosafuorotridecanoic acid                                                                                                                                   | 72629-94-8                                              | 276-745-2                                           |         |
| 87 | Tricosafuorododecanoic acid                                                                                                                                      | 307-55-1                                                | 206-203-2                                           |         |
| 88 | Henicosafuoroundecanoic acid                                                                                                                                     | 2058-94-8                                               | 218-165-4                                           |         |
| 89 | Heptacosafuorotetradecanoic acid                                                                                                                                 | 376-06-7                                                | 206-803-4                                           |         |
| 90 | Diazene-1,2-dicarboxamide (C,C'-<br>azodi(formamide))                                                                                                            | 123-77-3                                                | 204-650-8                                           |         |
| 91 | Cyclohexane-1,2-dicarboxylic anhydride;<br>cis-cyclohexane-1,2-dicarboxylic anhydride;<br>trans-cyclohexane-1,2-dicarboxylic anhydride                           | 85-42-7,<br>13149-00-3,<br>14166-21-3                   | 201-604-9,<br>236-086-3,<br>238-009-9               |         |
| 92 | Hexahydromethylphthalic anhydride ,<br>Hexahydro-4-methylphthalic anhydride ,<br>Hexahydro-1-methylphthalic anhydride ,<br>Hexahydro-3-methylphthalic anhydride. | 25550-51-0,<br>19438-60-9,<br>48122-14-1,<br>57110-29-9 | 247-094-1,<br>243-072-0,<br>256-356-4,<br>260-566-1 |         |
| 93 | 4-Nonylphenol, branched and linear                                                                                                                               | -                                                       | -                                                   |         |
| 94 | 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated                                                                                                                  | -                                                       | -                                                   |         |
| 95 | Methoxyacetic acid                                                                                                                                               | 625-45-6                                                | 210-894-6                                           |         |
| 96 | N,N-dimethylformamide                                                                                                                                            | 68-12-2                                                 | 200-679-5                                           |         |
| 97 | Dibutyltin dichloride (DBTC)                                                                                                                                     | 683-18-1                                                | 211-670-0                                           |         |

|     | SVHC Substances                                                                | CAS Number  | EINECS Number | Threshold Limit (PPM) by weight |
|-----|--------------------------------------------------------------------------------|-------------|---------------|---------------------------------|
| 98  | Lead monoxide (Lead oxide)                                                     | 1317-36-8   | 215-267-0     | 1000 PPM                        |
| 99  | Orange lead (Lead tetroxide)                                                   | 1314-41-6   | 215-235-6     |                                 |
| 100 | Lead bis(tetrafluoroborate)                                                    | 13814-96-5  | 237-486-0     |                                 |
| 101 | Trilead bis(carbonate)dihydroxide                                              | 1319-46-6   | 215-290-6     |                                 |
| 102 | Lead titanium trioxide                                                         | 12060-00-3  | 235-038-9     |                                 |
| 103 | Lead titanium zirconium oxide                                                  | 12626-81-2  | 235-727-4     |                                 |
| 104 | Silicic acid, lead salt                                                        | 11120-22-2  | 234-363-3     |                                 |
| 105 | Silicic acid (H <sub>2</sub> SiO <sub>5</sub> ), barium salt (1:1), lead-doped | 68784-75-8  | 272-271-5     |                                 |
| 106 | 1-bromopropane (n-propyl bromide)                                              | 106-94-5    | 203-445-0     |                                 |
| 107 | Methyloxirane (Propylene oxide)                                                | 75-56-9     | 200-879-2     |                                 |
| 108 | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear               | 84777-06-0  | 284-032-2     |                                 |
| 109 | Diisopentylphthalate (DIPP)                                                    | 605-50-5    | 210-088-4     |                                 |
| 110 | N-pentyl-isopentylphthalate                                                    | 776297-69-9 | -             |                                 |
| 111 | 1,2-diethoxyethane                                                             | 629-14-1    | 211-076-1     |                                 |
| 112 | Acetic acid, lead salt, basic                                                  | 51404-69-4  | 257-175-3     |                                 |
| 113 | Lead oxide sulfate                                                             | 12036-76-9  | 234-853-7     |                                 |
| 114 | [Phthalato(2-)]dioxotrilead                                                    | 69011-06-9  | 273-688-5     |                                 |
| 115 | Dioxobis(stearato)trilead                                                      | 12578-12-0  | 235-702-8     |                                 |
| 116 | Fatty acids, C16-18, lead salts                                                | 91031-62-8  | 292-966-7     |                                 |
| 117 | Lead cyanamate                                                                 | 20837-86-9  | 244-073-9     |                                 |
| 118 | Lead dinitrate                                                                 | 10099-74-8  | 233-245-9     |                                 |
| 119 | Pentalead tetraoxide sulphate                                                  | 12065-90-6  | 235-067-7     |                                 |
| 120 | Pyrochlore, antimony lead yellow                                               | 8012-00-8   | 232-382-1     |                                 |
| 121 | Sulfurous acid, lead salt, dibasic                                             | 62229-08-7  | 263-467-1     |                                 |
| 122 | Tetraethyllead                                                                 | 78-00-2     | 201-075-4     |                                 |
| 123 | Tetralead trioxide sulphate                                                    | 12202-17-4  | 235-380-9     |                                 |
| 124 | Trilead dioxide phosphonate                                                    | 12141-20-7  | 235-252-2     |                                 |
| 125 | Furan                                                                          | 110-00-9    | 203-727-3     |                                 |
| 126 | Diethyl sulphate                                                               | 64-67-5     | 200-589-6     |                                 |
| 127 | Dimethyl sulphate                                                              | 77-78-1     | 201-058-1     |                                 |
| 129 | Dinoseb (6-sec-butyl-2,4-dinitrophenol)                                        | 88-85-7     | 201-861-7     |                                 |
| 128 | 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine                             | 143860-04-2 | 421-150-7     |                                 |
| 130 | 4,4'-methylenedi-o-toluidine                                                   | 838-88-0    | 212-658-8     |                                 |
| 131 | 4,4'-oxydianiline and its salts                                                | 101-80-4    | 202-977-0     |                                 |
| 132 | 4-aminoazobenzene                                                              | 60-09-3     | 200-453-6     |                                 |
| 133 | 4-methyl-m-phenylenediamine (toluene-2,4-diamine)                              | 95-80-7     | 202-453-1     |                                 |
| 134 | 6-methoxy-m-toluidine (p-cresidine)                                            | 120-71-8    | 204-419-1     |                                 |
| 135 | Biphenyl-4-ylamine                                                             | 92-67-1     | 202-177-1     |                                 |
| 136 | o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]                                 | 97-56-3     | 202-591-2     |                                 |
| 137 | o-toluidine                                                                    | 95-53-4     | 202-429-0     |                                 |
| 138 | N-methylacetamide                                                              | 79-16-3     | 201-182-6     |                                 |
| 139 | Cadmium                                                                        | 7440-43-9   | 231-152-8     |                                 |
| 140 | Ammonium pentadecafluorooctanoate (APFO)                                       | 3825-26-1   | 233-320-4     |                                 |
| 141 | Pentadecafluorooctanoic acid (PFOA)                                            | 335-67-1    | 206-397-9     |                                 |
| 142 | Dipentyl phthalate (DPP)                                                       | 131-18-0    | 205-017-9     |                                 |
| 143 | Cadmium oxide                                                                  | 1306-19-0   | 215-146-2     |                                 |

|     | SVHC Substances                                                                                                                                                                                                                                                                                                                     | CAS Number                | EINECS Number           | Threshold Limit (PPM) by weight |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|---------------------------------|
| 144 | 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. | -                         |                         |                                 |
| 145 | Calcium Sulphide                                                                                                                                                                                                                                                                                                                    | 1306-23-6                 | 215-147-8               | 1000 PPM                        |
| 146 | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)                                                                                                                                                                                                                          | 573-58-0                  | 209-358-4               |                                 |
| 147 | Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)                                                                                                                                                                               | 1937-37-7                 | 217-710-3               |                                 |
| 148 | Dihexyl phthalate                                                                                                                                                                                                                                                                                                                   | 84-75-3                   | 201-559-5               |                                 |
| 149 | Imidazolidine-2-thione (2-imidazoline-2-thiol)                                                                                                                                                                                                                                                                                      | 96-45-7                   | 202-506-9               |                                 |
| 150 | Lead di(acetate)                                                                                                                                                                                                                                                                                                                    | 301-04-2                  | 206-104-4               |                                 |
| 151 | Trixylyl phosphate                                                                                                                                                                                                                                                                                                                  | 25155-23-1                | 246-677-8               |                                 |
| 152 | Cadmium chloride                                                                                                                                                                                                                                                                                                                    | 10108-64-2                | 233-296-7               |                                 |
| 153 | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear                                                                                                                                                                                                                                                                    | 68515-50-4                | 271-093-5               |                                 |
| 154 | Sodium peroxometaborate                                                                                                                                                                                                                                                                                                             | 7632-04-4                 | 231-556-4               |                                 |
| 155 | Sodium perborate; perboric acid, sodium salt                                                                                                                                                                                                                                                                                        | -                         | 239-172-9;<br>234-390-0 |                                 |
| 156 | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)                                                                                                                                                                                                                                                                            | 25973-55-1                | 247-384-8               |                                 |
| 157 | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)                                                                                                                                                                                                                                                                                | 3846-71-7                 | 223-346-6               |                                 |
| 158 | reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)                                                                        | -                         | -                       |                                 |
| 159 | Cadmium fluoride                                                                                                                                                                                                                                                                                                                    | 7790-79-6                 | 232-222-0               |                                 |
| 160 | Cadmium sulphate                                                                                                                                                                                                                                                                                                                    | 10124-36-4,<br>31119-53-6 | 233-331-6               |                                 |
| 161 | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)                                                                                                                                                                                                                                              | 15571-58-1                | 239-622-4               |                                 |
| 162 | 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)                                                                                                                                                     | 68515-51-5,<br>68648-93-1 | 271-094-0               |                                 |
| 163 | 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]                                                                                           | -                         | -                       |                                 |
| 164 | Nitrobenzene                                                                                                                                                                                                                                                                                                                        | 98-95-3                   | 202-716-0               |                                 |
| 165 | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)                                                                                                                                                                                                                                                                      | 3864-99-1                 | 223-383-8               |                                 |
| 166 | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-                                                                                                                                                                                                                                                                                     | 36437-37-3                | 253-037-1               |                                 |

|     |                                                                                                                                                                                                                                                                                                   |                                     |                             |          |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------|----------|
|     | butyl)phenol (UV-350)                                                                                                                                                                                                                                                                             |                                     |                             |          |
| 167 | 1,3-propanesultone                                                                                                                                                                                                                                                                                | 1120-71-4                           | 214-317-9                   |          |
| 168 | Perfluorononan-1-oic-acid and its sodium and ammonium saltspropanesultone                                                                                                                                                                                                                         | 375-95-1<br>21049-39-8<br>4149-60-4 | 206-801-3                   |          |
| 169 | Benzo[def]chrysene ; (Benzo[a]pyrene)                                                                                                                                                                                                                                                             | 50-32-8                             | 200-028-5                   |          |
| 170 | 4,4'-isopropylidenediphenol (bisphenol A; BPA)                                                                                                                                                                                                                                                    | 80-05-7                             | 201-245-8                   | 1000 PPM |
| 171 | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts                                                                                                                                                                                                                              | 335-76-2<br>3830-45-3<br>3108-42-7  | 206-400-3<br>-<br>221-470-5 |          |
| 172 | p-(1,1-dimethylpropyl)phenol                                                                                                                                                                                                                                                                      | 80-46-6                             | 201-280-9                   |          |
| 173 | 4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] | -                                   | -                           |          |
| 174 | Perfluorohexane-1-sulfonic acid and its salts (PFHxS)                                                                                                                                                                                                                                             | -                                   | -                           |          |
| 175 | Benz[a]anthracene                                                                                                                                                                                                                                                                                 | 56-55-3,<br>1718-53-2               | 200-280-6                   |          |
| 176 | Cadmium carbonate                                                                                                                                                                                                                                                                                 | 513-78-0                            | 208-168-9                   |          |
| 177 | Cadmium hydroxide                                                                                                                                                                                                                                                                                 | 21041-95-2                          | 244-168-5                   |          |
| 178 | Cadmium nitrate                                                                                                                                                                                                                                                                                   | 10022-68-1,<br>10325-94-7           | 233-710-6                   |          |
| 179 | Chrysene                                                                                                                                                                                                                                                                                          | 218-01-9,<br>1719-03-5              | 205-923-4                   |          |
| 180 | Dodecachloropentacyclo[12.2.1.16.9.02.13.05.10]octa deca-7,15-diene ("Dechlorane Plus"™) covering any of its individual anti- and syn-isomers or any combination thereof formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with 180                                                    | -                                   | -                           |          |
| 181 | Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)                                                                                                                                                                                   | -                                   | -                           |          |
| 182 | Octamethylcyclotetrasiloxane (D4)                                                                                                                                                                                                                                                                 | 556-67-2                            | 209-136-7                   |          |
| 183 | Decamethylcyclopentasiloxane (D5)                                                                                                                                                                                                                                                                 | 541-02-6                            | 208-764-9                   |          |
| 184 | Dodecamethylcyclohexasiloxane (D6)                                                                                                                                                                                                                                                                | 540-97-6                            | 208-762-8                   |          |
| 185 | Lead                                                                                                                                                                                                                                                                                              | 7439-92-1                           | 231-100-4                   |          |
| 186 | Disodium octaborate                                                                                                                                                                                                                                                                               | 12008-41-2                          | 234-541-0                   |          |
| 187 | Benzo[ghi]perylene                                                                                                                                                                                                                                                                                | 191-24-2                            | 205-883-8                   |          |
| 188 | Terphenyl hydrogenated                                                                                                                                                                                                                                                                            | 61788-32-7                          | 262-967-7                   |          |
| 189 | Ethylenediamine (EDA)                                                                                                                                                                                                                                                                             | 107-15-3                            | 203-468-6                   |          |
| 190 | Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)                                                                                                                                                                                                                      | 552-30-7                            | 209-008-0                   |          |
| 191 | Dicyclohexyl phthalate (DCHP)                                                                                                                                                                                                                                                                     | 84-61-7                             | 201-545-9                   |          |
| 192 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane                                                                                                                                                                                                                                                         | 6807-17-6                           | 401-720-1                   |          |
| 193 | Benzo[k]fluoranthene                                                                                                                                                                                                                                                                              | 207-08-9                            | 205-916-6                   |          |
| 194 | Fluoranthene                                                                                                                                                                                                                                                                                      | 206-44-0                            | 205-912-4                   |          |
| 195 | Phenanthrene                                                                                                                                                                                                                                                                                      | 85-01-8                             | 201-581-5                   |          |
| 196 | Pyrene                                                                                                                                                                                                                                                                                            | 129-00-0                            | 204-927-3                   |          |
| 197 | 1,7,7-trimethyl-3-                                                                                                                                                                                                                                                                                | 15087-24-8                          | 239-139-9                   |          |

|     |                                                                                                                                                                                                          |                                                    |                                            |         |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------|---------|
|     | (phenylmethylene)bicyclo[2.2.1]heptan-2-one                                                                                                                                                              |                                                    |                                            |         |
| 198 | 2-methoxyethyl acetate                                                                                                                                                                                   | 110-49-6                                           | 203-772-9                                  |         |
| 199 | Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)                                                                             | -                                                  | -                                          |         |
| 200 | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)                                             | -                                                  | -                                          |         |
| 201 | 4-tert-butylphenol                                                                                                                                                                                       | 98-54-4                                            | 202-679-0                                  | 1000 PM |
| 202 | Diisohexyl phthalate                                                                                                                                                                                     | 71850-09-4                                         | 276-090-2                                  |         |
| 203 | 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone                                                                                                                                                      | 119313-12-1                                        | 404-360-3                                  |         |
| 204 | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one                                                                                                                                                 | 71868-10-5                                         | 400-600-6                                  |         |
| 205 | Perfluorobutane sulfonic acid (PFBS) and its salts                                                                                                                                                       | -                                                  | -                                          |         |
| 206 | 1-vinylimidazole                                                                                                                                                                                         | 1072-63-5                                          | 214-012-0                                  |         |
| 207 | 2-methylimidazole                                                                                                                                                                                        | 693-98-1                                           | 211-765-7                                  |         |
| 208 | Butyl 4-hydroxybenzoate (Butylparaben)                                                                                                                                                                   | 94-26-8                                            | 202-318-7                                  |         |
| 209 | Dibutylbis(pentane-2,4-dionato-O,O')tin                                                                                                                                                                  | 22673-19-4                                         | 245-152-0                                  |         |
| 210 | Bis(2-(2-methoxyethoxy)ethyl)ether                                                                                                                                                                       | 143-24-8                                           | 205-594-7                                  |         |
| 211 | Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety | -                                                  | -                                          |         |
| 212 | 2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers                                                                                                                                   | -                                                  | -                                          |         |
| 213 | Orthoboric acid, sodium salt                                                                                                                                                                             | 13840-56-7                                         | 237-560-2                                  |         |
| 214 | 2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/ 3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)                             | 3296-90-0;<br>36483-57-5;<br>1522-92-5;<br>96-13-9 | 221-967-7;<br>253-057-0;<br>-<br>202-480-9 |         |
| 215 | Glutaral                                                                                                                                                                                                 | 111-30-8                                           | 203-856-5                                  |         |
| 216 | 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                        | -                                                  | -                                          |         |
| 217 | Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof (PDDP)                       | -                                                  | -                                          |         |
| 218 | 1,4-dioxane                                                                                                                                                                                              | 123-91-1                                           | 204-661-8                                  |         |
| 219 | 4,4'-(1-methylpropylidene)bisphenol                                                                                                                                                                      | 77-40-7                                            | 201-025-1                                  |         |
| 220 | 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol                                                                                                                                                             | 119-47-1                                           | 204-327-1                                  |         |
| 221 | tris(2-methoxyethoxy)vinylsilane                                                                                                                                                                         | 1067-53-4                                          | 213-934-0                                  |         |
| 222 | ( $\pm$ )-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)                                             | -                                                  | -                                          |         |
| 223 | 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)                                                             | 255881-94-8                                        | 401-850-9                                  |         |

|     |                                                                                                                                                               |             |           |         |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|---------|
| 224 | N-(hydroxymethyl)acrylamide                                                                                                                                   | 924-42-5    | 213-103-2 | 1000 PM |
| 225 | 1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]                                                                                                      | 37853-59-1  | 253-692-3 |         |
| 226 | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol                                                                                                              | 79-94-7     | 201-236-9 |         |
| 227 | 4,4'-sulphonyldiphenol                                                                                                                                        | 80-09-1     | 201-250-5 |         |
| 228 | Barium diboron tetraoxide                                                                                                                                     | 13701-59-2  | 237-222-4 |         |
| 229 | Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof                                                      | -           | -         |         |
| 230 | Isobutyl 4-hydroxybenzoate                                                                                                                                    | 4247-02-3   | 224-208-8 |         |
| 231 | Melamine                                                                                                                                                      | 108-78-1    | 203-615-4 |         |
| 232 | Perfluoroheptanoic acid and its salts                                                                                                                         | -           | -         |         |
| 233 | Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine | -           | 473-390-7 |         |
| 234 | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide                                                                                                               | 75980-60-8  | 278-355-8 |         |
| 235 | Bis(4-chlorophenyl) sulphone                                                                                                                                  | 80-07-9     | 201-247-9 |         |
| 236 | 2,4,6-tri-tert-butylphenol                                                                                                                                    | 732-26-3    | 211-989-5 |         |
| 237 | 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol                                                                                                   | 3147-75-9   | 221-573-5 |         |
| 238 | 2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one                                                                          | 119344-86-4 | 438-340-0 |         |
| 239 | Bumetizole                                                                                                                                                    | 3896-11-5   | 223-445-4 |         |
| 240 | Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol                                                                                | 68512-30-1  | 700-960-7 |         |

**ECHA recommended Substances for inclusion in Authorization list: Annex XIV.**

All substances will be 'prohibited from placing on market by Sunset Date', unless authorized.

<https://www.echa.europa.eu/authorisation-list/>

**ECHA recommended Substances for inclusion in Restriction list: Annex XVII.**

All substances will be 'prohibited' use in production.

<https://www.echa.europa.eu/substances-restricted-under-reach/>

**F) Conflict Minerals**

| No. | Conflict Minerals Substances    |
|-----|---------------------------------|
| 1   | Tin and Tin compounds           |
| 2   | Tantalum and Tantalum compounds |
| 3   | Tungsten and Tungsten compounds |
| 4   | Gold and Gold compounds         |

## G) Industry Specific Restrictions /Customer Specific Restrictions

### 1) Detailed Substances with CAS Numbers

These lists are typically not comprehensive; they represent examples of chemicals listing CAS numbers and/or EC numbers if applicable or available. In case the list is complete (and the reporting requirement is limited to those substances listed) this is indicated in a note below the respective substance category.

#### Appendix A

| <b>Asbestos</b>     | <b>CAS Numbers</b> |
|---------------------|--------------------|
| Asbestos            | 1332-21-4          |
| Actinolite          | 77536-66-4         |
| Amosite (Grunerite) | 12172-73-5         |
| Anthophyllite       | 77536-67-5         |
| Chrysotile          | 12001-29-5         |
| Crocidolite         | 12001-28-4         |
| Tremolite           | 77536-68-6         |

| <b>Azocolorants and azodyes which form certain aromatic amines</b> | <b>CAS Numbers</b> |
|--------------------------------------------------------------------|--------------------|
| <b>Aromatic Amines</b>                                             |                    |
| Biphenyl-4-ylamine                                                 | 92-67-1            |
| Benzidine                                                          | 92-87-5            |
| 4-chloro-o-toluidine                                               | 95-69-2            |
| 2-naphthylamine                                                    | 91-59-8            |
| o-aminoazotoluene                                                  | 97-56-3            |
| 5-nitro-o-toluidine                                                | 99-55-8            |
| 4-chloroaniline                                                    | 106-47-8           |
| 4-methoxy-m-phenylenediamine                                       | 615-05-4           |
| 4,4'-methylenedianiline                                            | 101-77-9           |
| 3,3'-dichlorobenzidine                                             | 91-94-1            |
| 3,3'-dimethoxybenzidine                                            | 119-90-4           |
| 3,3'-dimethylbenzidine                                             | 119-93-7           |
| 4,4'-methylenedi-o-toluidine                                       | 838-88-0           |
| 6-methoxy-m-toluidine                                              | 120-71-8           |
| 4,4'-methylene-bis(2-chloroaniline)                                | 101-14-4           |
| 4,4'-oxydianiline                                                  | 101-80-4           |
| 4,4'-thiodianiline                                                 | 139-65-1           |
| o-toluidine                                                        | 95-53-4            |
| 4-methyl-m-phenylenediamine                                        | 95-80-7            |
| 2,4,5-trimethylaniline                                             | 137-17-7           |
| o-anisidine                                                        | 90-04-0            |
| 4-amino azobenzene                                                 | 60-09-3            |

#### **Ozone Depleting Substances (ODS)**

Class I & Class II refer to <http://www.epa.gov/ozone-layer-protection/ozone-depleting-substances>

| <b>US Toxic Substances Control Act (TSCA)</b>     | <b>CAS Numbers</b> |
|---------------------------------------------------|--------------------|
| Phenol, isopropylated phosphate (3:1) (PIP (3:1)) | 68937-41-7         |
| Decabromodiphenyl ether (decaBDE)                 | 1163-19-5          |
| 2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)         | 732-26-3           |
| Hexachlorobutadiene (HCBd)                        | 87-68-3            |
| Pentachlorothiophenol (PCTP)                      | 133-49-3           |

| <b>Brominated Flame Retardants<br/>(other than PBBs, PBDEs or HBCDD)</b> | <b>CAS Numbers</b> |
|--------------------------------------------------------------------------|--------------------|
| N,N'-Ethylene -bis-(tetrabromo-phthalimide)                              | 32588-76-4         |
| Ethylene-bis(5,6-dibromo-norbornane-2,3-dicarboximide)                   | 52907-07-0         |
| 2,3-Dibromo-2-butene-1,4-diol                                            | 3234-02-4          |
| Dibromo-neopentyl-glycol                                                 | 3296-90-0          |

|                                                    |             |
|----------------------------------------------------|-------------|
| Dibromo-propanol                                   | 96-13-9     |
| Tribromo-neopentyl-alcohol                         | 36483-57-5  |
| Poly tribromo-styrene                              | 57137-10-7  |
| Tribromo-styrene                                   | 61368-34-1  |
| Dibromo-styrene grafted PP                         | 171091-06-8 |
| Poly-dibromo-styrene                               | 31780-26-4  |
| Bromo-/Chloro-paraffins                            | 68955-41-9  |
| Bromo-/Chloro-alpha-olefin                         | 82600-56-4  |
| Vinylbromide                                       | 593-60-2    |
| Tris-(2,3-dibromo-propyl)-isocyanurate             | 52434-90-9  |
| Tris(2,4-Dibromo-phenyl) phosphate                 | 49690-63-3  |
| Tris(tribromo-neopentyl) phosphate                 | 19186-97-1  |
| Chlorinated and brominated phosphate ester         | 125997-20-8 |
| Pentabromo-toluene                                 | 87-83-2     |
| Pentabromo-benzyl bromide                          | 38521-51-6  |
| 1,3-Butadiene homopolymer,brominated               | 68441-46-3  |
| Pentabromo-benzyl-acrylate, monomer                | 59447-55-1  |
| Pentabromo-benzyl-acrylate, polymer                | 59447-57-3  |
| Decabromo-diphenyl-ethane                          | 84852-53-9  |
| Tribromo-bisphenyl-maleinimide                     | 59789-51-4  |
| Tetrabromo-cyclo-octane                            | 31454-48-5  |
| 1,2-Dibromo-4-(1,2 dibromo-methyl)-cyclo-hexane    | 3322-93-8   |
| Tetrabromophthalic acid Na salt                    | 25357-79-3  |
| Tetrabromo phthalic anhydride                      | 632-79-1    |
| Octabromo-1,1,3-trimethyl-1-phenylindane (FR-1808) | 155613-93   |
| RED Phosphorous                                    | 7723-14-0   |

#### **Cadmium/Cadmium Compounds**

|                  |                    |
|------------------|--------------------|
| Cadmium          | <b>CAS Numbers</b> |
| Cadmium oxide    | 7440-43-9          |
| Cadmium sulfide  | 1306-19-0          |
| Cadmium chloride | 1306-23-6          |
| Cadmium sulfate  | 10108-64-2         |
|                  | 10124-36-4         |

#### **Chromium VI Compounds**

|                                      | <b>EC Numbers</b> | <b>CAS Numbers</b> |
|--------------------------------------|-------------------|--------------------|
| Chromium (VI) oxide                  |                   | 1333-82-0          |
| Barium chromate                      |                   | 10294-40-3         |
| Calcium chromate                     |                   | 13765-19-0         |
| Chromium trioxide                    |                   | 1333-82-0          |
| Lead (II) chromate                   | 231-846-0         | 7758-97-6          |
| Lead chromate molybdate sulphate red | 235-759-9         | 12656-85-8         |

#### **Chromium VI Compounds**

|                           | <b>EC Numbers</b> | <b>CAS Numbers</b> |
|---------------------------|-------------------|--------------------|
| Lead sulfochromate yellow | 215-693-7         | 1344-37-2          |
| Sodium chromate           |                   | 7775-11-3          |
| Sodium dichromate         |                   | 10588-01-9         |
| Strontium chromate        |                   | 7789-06-2          |
| Potassium dichromate      |                   | 7778-50-9          |
| Potassium chromate        |                   | 7789-00-6          |
| Zinc chromate             |                   | 13530-65-9         |

#### **Dibutyltin Compounds**

|                      | <b>CAS Numbers</b> |
|----------------------|--------------------|
| Dibutyltin oxide     | 818-08-6           |
| Dibutyltin diacetate | 1067-33-0          |
| Dibutyltin dilaurate | 77-58-7            |
| Dibutyltin maleate   | 78-04-6            |

**Diocetyl tin Compounds**

Diocetyl Tin Oxide  
Diocetyl tin dilaurate

**CAS Numbers**

870-08-6  
3648-18-8

**Fluorinated Greenhouse Gases**
**Perfluorocarbons (PFC), Sulfur hexafluoride (SF6) & Hydrofluorocarbons (HFC) Fluorinated Greenhouse Gases**

Tetrafluoromethane (Carbon tetrafluoride, PFC-14)

Hexafluoroethane (PFC-116)

Octafluoropropane (PFC-218)

Decafluorobutane (PFC-31-10)

Dodecafluoropentane (PFC-41-12)

Tetradecafluorohexane (PFC-51-14)

Octafluorocyclobutane (PFC-c318)

Sulfur Hexafluoride (SF6)

Trifluoromethane (HFC-23)

Difluoromethane (HFC-32)

Methyl fluoride (HFC-41)

2H,3H-Decafluoropentane (HFC-43-10mee)

Pentafluoroethane (HFC-125)

1,1,2,2-Tetrafluoroethane (HFC-134)

1,1,1,2-Tetrafluoroethane (HFC-134a)

1,1-Difluoroethane (HFC-152a)

1,1,2-Trifluoroethane (HFC-143 )

1,1,1-Trifluoroethane (HFC-143a)

2H-Heptafluoropropane (HFC-227ea)

1,1,1,2,2,3-Hexafluoro-propane ( HFC-236cb)

1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)

1,1,1,3,3,3-Hexafluoropropane (HFC-236a)

1,1,2,2,3-Pentafluoropropane (HFC- 245ca)

1,1,1,3,3-Pentafluorobutane (HFC-65mfc)

**CAS Numbers**

75-73-0  
76-16-4  
76-19-7  
355-25-9  
678-26-2  
355-42-0  
115-25-3  
2551-62-4  
75-46-7  
75-10-5  
593-53-3  
138495-42-8  
354-33-6  
359-35-3  
811-97-2  
75-37-6  
430-66-0  
420-46-2  
431-89-0  
677-56-5  
431-63-0  
  
690-39-1  
460-73-1  
408-56-6

**HBCDD and all Major Diastereoisomers**

Hexabromocyclododecane (HBCDD)

-hexabromocyclododecane

-hexabromocyclododecane

-hexabromocyclododecane

**EC Numbers**

247-148-4 and  
221-695-9

NA

NA

NA

**CAS Numbers**

25637-99-4 and 3194-55-6  
  
134237-50-6  
134237-51-7  
134237-52-8

**Mercury /Mercury Compounds**

Mercury

Mercuric chloride

Mercury (II) chloride

Mercuric sulfate

Mercuric nitrate

Mercuric (II) oxide

**CAS Numbers**

7439-97-6  
33631-63-9  
7487-94-7  
7783-35-9  
10045-94-0  
21908-53-2

**Lead/lead Compounds**

Lead

Lead (II) sulfate

Lead (II) carbonate

Lead (II) chromate

Lead chromate molybdate

sulphate red

Lead hydrocarbonate

Lead acetate

**EC Numbers**

231-846-0

235-759-9

**CAS Numbers**

7439-92-1  
7446-14-2  
598-63-0  
7758-97-6  
12656-85-8  
  
1319-46-6  
301-04-2

|                                         |            |
|-----------------------------------------|------------|
| Lead (II) acetate, trihydrate           | 6080-56-4  |
| Lead phosphate                          | 7446-27-7  |
| Lead selenide                           | 12069-00-0 |
| Lead (IV) oxide                         | 1309-60-0  |
| Lead (II,IV) oxide                      | 1314-41-6  |
| Lead (II) sulfide                       | 1314-87-0  |
| Lead (II) oxide                         | 1317-36-8  |
| Lead (II) carbonate basic               | 1319-46-6  |
| Lead hydroxidcarbonate                  | 1344-36-1  |
| Lead (II) phosphate                     | 7446-27-7  |
| Lead sulfochromate yellow               | 215-693-7  |
| Lead (II) titanate                      | 12060-00-3 |
| Lead sulfate, sulphuric acid, lead salt | 15739-80-7 |
| Lead sulphate, tribasic                 | 12202-17-4 |
| Lead stearate                           | 1072-35-1  |

|                             |                    |
|-----------------------------|--------------------|
| Perchlorate Compounds       | <b>CAS Numbers</b> |
| Lithium perchlorate         | 7791-03-9          |
| Other perchlorate compounds | 7601-89-0          |
|                             | 7778-74-7          |
|                             | 7790-98-9 1        |
|                             | 0034-81-8          |

#### **PFOS Compounds**

|                                                 |                    |
|-------------------------------------------------|--------------------|
| Perfluorooctane Sulfonates (PFOS)               | <b>CAS Numbers</b> |
| C8F17SO2X, where X = OR, NR or other derivative | NA                 |

#### **Selected Phthalates Group 1 (BBP, DBP, DEHP)**

| <b>Phthalates</b>                 | <b>EC Numbers</b> | <b>CAS Numbers</b> |
|-----------------------------------|-------------------|--------------------|
| Butylbenzyl phthalate (BBP)       | 201-622-7         | 85-68-7            |
| Dibutyl phthalate (DBP)           | 201-557-4         | 84-74-2            |
| Di(2-ethylhexyl) phthalate (DEHP) | 204-211-0         | 117-81-7           |
| Diisobutyl phthalate (DIBP)       | 201-553-2         | 84-69-5            |

#### **Selected Phthalates Group 2 (DIDP, DINP, DNOP)**

| <b>Phthalates</b>           | <b>EC Numbers</b> | <b>CAS Numbers</b> |
|-----------------------------|-------------------|--------------------|
| Diisodecyl phthalate (DIDP) | 247-977-1         | 26761-40-0         |
|                             | 271-091-4         | 68515-49-1         |
| Diisononyl phthalate (DINP) | 249-079-5         | 28553-12-0         |
|                             | 271-090-9         | 68515-48-0         |
| Di-n-octyl phthalate (DNOP) | 204-214-7         | 117-84-0           |

#### **Polybrominated Biphenyls (PBBs)**

|                          |                    |
|--------------------------|--------------------|
| Polybrominated Biphenyls | <b>CAS Numbers</b> |
| Dibromobiphenyl          | 59536-65-1         |
| 2-Bromobiphenyl          | 92-86-4            |
| 3-Bromobiphenyl          | 2052-07-5          |
| 4-Bromobiphenyl          | 2113-57-7          |
| Tribromobiphenyl         | 92-66-0            |
| Tetrabromobiphenyl       | 59080-34-1         |
| Pentabromobiphenyl       | 40088-45-7         |
| Hexabromobiphenyl        | 56307-79-0         |
| Hexabromo-1,1-biphenyl   | 59080-40-9         |
| Firemaster FF-1          | 36355-01-8         |
| Heptabromobiphenyl       | 67774-32-7         |
| Octabromobiphenyl        | 35194-78-6         |
| Nonabromobiphenyl        | 61288-13-9         |
| Decabromobiphenyl        | 27753-52-2         |
|                          | 13654-09-6         |

**Polychlorinated Biphenyls (PCBs) and specific substitutes**
**Polychlorinated Biphenyls (PCBs)**

Polychlorinated Biphenyls (all isomers and congeners)

Monomethyl-tetrachloro-diphenyl methane

(Ugilec 141)

Monomethyl-dichloro-diphenyl methane

(Ugilec 121, Ugilec 21)

Monomethyl-dibromo-diphenyl methane (DBBT)

**CAS Numbers**

1336-36-3

76253-60-6

81161-70-8

99688-47-8

**Polybrominated Diphenyl Ethers (PBDEs)**

Bromodiphenyl ether

Dibromodiphenyl ether

Tribromodiphenyl ether

Tetrabromodiphenyl ether

Pentabromodiphenyl ether (note: Commercially available

PeBDPO is a complex reaction mixture containing a variety of brominated diphenyloxides.

Hexabromodiphenyl ether

Heptabromodiphenyl ether

Octabromodiphenyl ether

Nonabromodiphenyl ether

Decabromodiphenyl ether

**CAS Numbers**

101-55-3

2050-47-7

49690-94-0

40088-47-9

32534-81-9 (CAS number used for commercial grades of PeBDPO)

36483-60-0

68928-80-3

32536-52-0

63936-56-1

1163-19-5

**Polychlorinated Terphenyls (PCTs) Polychlorinated Terphenyls (PCTs)**

Polychlorinated Terphenyls

(all isomers and congeners)

**CAS Numbers**

61788-33-8

**Radioactive Substances (Radioactive Isotope) Radioactive Substances**

Uranium-238

Radon

Americium-241

Thorium-232

Cesium-137

Strontium-90

Other radioactive substances

**CAS Numbers**

7440-61-1

10043-92-2

14596-10-2

7440-29-1

10045-97-3

10098-97-2

-

**Dibutyltin Compounds (DBT)**

Dibutyltin oxide

Dibutyltin diacetate

Dibutyltin dilaurate

Dibutyltin maleate

Other dibutyltin compounds

**CAS Numbers**

818-08-6

1067-33-0

77-58-7

78-04-6

-

**Diocetyl tin Compounds(DOT)**

Diocetyl Tin Oxide

Diocetyl tin dilaurate

Other Diocetyl tin compounds

**CAS Numbers**

870-08-6

3648-18-8

**Disodium tetraborate, anhydrous Boric Acid**

Disodium tetraborate decahydrate

Disodium tetraborate, anhydrous

Disodium tetraborate, pentahydrate

**EC Numbers**

215-540-4

**CAS Numbers**

1303-96-4

1330-43-4

12179-04-3

**Hexabromocyclododecane**
**EC Numbers**
**CAS Numbers**

**(HBCDD) HBCDD and all**
**Major Diastereoisomers**

|                                  |                     |                      |
|----------------------------------|---------------------|----------------------|
| Hexabromocyclododecane (HBCDD)   | 247-148-4 221-695-9 | 25637-99-4 3194-55-6 |
| $\alpha$ -hexabromocyclododecane | NA                  | 134237-50-6          |
| $\beta$ -hexabromocyclododecane  | NA                  | 134237-51-7          |
| $\gamma$ -hexabromocyclododecane | NA                  | 134237-52-8          |

**Polychlorinated Biphenyls (PCBs) and specific substitutes**
**Polychlorinated Biphenyls (PCBs)**

|                                                              |            |
|--------------------------------------------------------------|------------|
| Polychlorinated Biphenyls (all isomers and congeners)        | 1336-36-3  |
| Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)         | 76253-60-6 |
| Monomethyl-dichloro-diphenyl methane (Ugilec 121, Ugilec 21) | 81161-70-8 |
| Monomethyl-dibromo-diphenyl methane (DBBT)                   | 99688-47-8 |

**CAS Numbers**
**Polychlorinated Naphthalenes (PCNs) Polychlorinated Naphthalenes**

|                                    |            |
|------------------------------------|------------|
| Polychlorinated Naphthalenes       | 70776-03-3 |
| Other polychlorinated Naphthalenes | -          |

**CAS Numbers**
**Polychlorinated Terphenyls (PCTs) Polychlorinated Terphenyls (PCTs)**

|                                                        |            |
|--------------------------------------------------------|------------|
| Polychlorinated Terphenyls (all isomers and congeners) | 61788-33-8 |
|--------------------------------------------------------|------------|

**CAS Numbers**
**Polyvinyl Chloride (PVC) Polyvinyl Chloride**

|                          |           |
|--------------------------|-----------|
| Polyvinyl chloride (PVC) | 9002-86-2 |
|--------------------------|-----------|

**CAS Numbers**
**Short Chain Chlorinated**
**Paraffins (SCCPs) Short**
**Chain Chlorinated**
**Paraffin's (C10-C13)**

|                         |           |             |
|-------------------------|-----------|-------------|
| Alkanes, C10-13, chloro | 287-476-5 | 85535-84-8  |
| Alkanes, C10-12, chloro |           | 108171-26-2 |
| Alkanes, C12-13, chloro |           | 71011-12-6  |
| Alkanes, chloro         |           | 61788-76-9  |

**EC Numbers**
**CAS Numbers**
**Tri-substituted Organostannic Compounds Tri-substituted Organostannic Compounds**

|                                                                                     |                        |
|-------------------------------------------------------------------------------------|------------------------|
| Triphenyltin-N, N-dimethyldithiocarbamate                                           | 1803-12-9              |
| Triphenyltinfluoride                                                                | 379-52-2               |
| Triphenyltinacetate                                                                 | 900-95-8               |
| Triphenyltinchloride                                                                | 639-58-7               |
| Triphenyltinhydroxide                                                               | 76-87-9                |
| Triphenyltin fattyacid((9-11)salt)                                                  | 18380-71-7, 18380-72-8 |
|                                                                                     | 47672-31-1             |
|                                                                                     | 94850-90-5             |
| Triphenyltinchloroacetate                                                           | 094-94-2               |
| Tributyltinmethacrylate                                                             | 2155-70-6              |
| Bis(tributyltin)fumalate                                                            | 6454-35-9              |
| Tributyltinfluoride                                                                 | 1983-10-4              |
| Bis(tributyltin)2,3-dibromosuccinate                                                | 31732-71-5             |
| Tributyltinacetate                                                                  | 56-36-0                |
| Tributyltinlaurate                                                                  | 3090-36-6              |
| Bis(tributyltin)phthalate                                                           | 4782-29-0              |
| Copolymer of alkyl (c=8) acrylate, methyl methacrylate and tributyltin methacrylate | 67772-01-4             |
| Tributyltinsulfamate                                                                | 6517-25-5              |
| Bis(tributyltin)maleate                                                             | 14275-57-1             |
| Tributyltinchloride                                                                 | 1461-22-9 7342-38-3    |

**CAS Numbers**



Tributyltin cyclopentane carbonate = mixture  
Tributyltin-1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-  
isopropyl-1,4a-dimethyl-1-phenanthrenecarboxylatemix

85409-17-2  
26239-64-5

**Specific Benzotriazole**

2-(3',5'-Di-tert-butyl-2'-hydroxyphenyl)benzotriazole

**CAS Numbers**

3846-71-7

**Dimethyl fumarate (DMF)**

Dimethyl fumarate

**CAS Numbers**

624-49-7

**Perfluorocarboxylic acid (PFCA)**

Linear and branched perfluorocarboxylic acids  
(C9-C14 PFCAs), including their salts, and C9-  
C14 PFCA-related substances]

**CAS Numbers**

375-95-1  
335-76-2  
2058-94-8  
307-55-1  
72629-94-8  
376-06-7