

**TORAY**

# TORAY PLASTICS (MALAYSIA) SDN BERHAD

Company Reg. no.: 197901002368 (46619-P)

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To Whom It May Concern:

From :



SK Teh  
General Manager  
Technology Centre

Date: 24<sup>th</sup> January 2024

Dear Valued Customers,

**Re: Non-Inclusion of Prohibited Chemical Substances in TOYOLAC<sub>TM</sub> Resin**

We wish to express our deepest appreciation for your excellent support towards our TOYOLAC<sub>TM</sub> resin. Toray Plastics (Malaysia) Sdn. Bhd. (TPM) herein declares that all resin products as listed in **Table 1: TOYOLAC<sub>TM</sub> Resins** (Natural and Standard Black\* color) supplied by our company to your company and any of its affiliates and subsidiaries follow and comply with the following requirements:

- RoHS Directive 2011/65/EU & Directive (EU) 2015/863
- REACH regulation EC No. 1907/2006
- Banned Phthalate Plasticizers 1999/815/EEC
- Montreal Protocol on Substances that Deplete the Ozone Layer
- Azo Dyes and Pigments Forming Specified Amines 2002/61/EC
- Conflict Mineral of Democratic Republic of the Congo
- Level 1 TPM Prohibited Substances

Chemical substances listed in **Attachment 1: List of Prohibited Chemical Substances (Rev. 28)**, are not intentionally added in any production stage of the mentioned TOYOLAC<sub>TM</sub> resins, to best of our knowledge.

In view of the many factors that may affect processing and application of our products, these information do not relieve user from carrying out own investigation and test, neither do these data imply any guarantee, or warranty for certain properties, uses, suitability, safety, hazards or health effects. This information relates only to the above mentioned materials as delivered in their original packaging. Besides, it does not relate to any product made of these materials with or without the inclusion of further additives. Thus, TPM makes no warranties, express or implied and assumes no liabilities in any use of the information.

Should you need further clarification, please feel free to contact us.

**Table 1: TOYOLAC™ Resins**

| <b>TYPES</b>                                | <b>GRADE NAME</b>  |  |
|---|--|--|
| <b>Transparent MABS</b>                     | TOYOLAC™ 920 555<br>TOYOLAC™ 900 352A<br>TOYOLAC™ 900 352<br>TOYOLAC™ 912 X01<br>TOYOLAC™ 990 X88  | TOYOLAC™ 920 555 U<br>TOYOLAC™ 900 352A U<br>TOYOLAC™ 900 352 U<br>TOYOLAC™ 912 X01 U<br>TOYOLAC™ 990 X77  |
| <b>General Purpose ABS</b>                  | TOYOLAC™ 100 322<br>TOYOLAC™ 100 X01<br>TOYOLAC™ 250 X10<br>TOYOLAC™ 500 322<br>TOYOLAC™ 700 314<br>TOYOLAC™ 700 X01<br>TOYOLAC™ 600 X50<br>TOYOLAC™ 600 X52         | TOYOLAC™ 100 322 U<br>TOYOLAC™ 100 X01 U<br>TOYOLAC™ 250 X10 U<br>TOYOLAC™ 500 322 U<br>TOYOLAC™ 700 314 U<br>TOYOLAC™ 700 X01 U<br>TOYOLAC™ 600 X50 U<br>TOYOLAC™ 600 X52 U |
| <b>Glass Fiber Reinforced AS/ABS</b>        | TOYOLAC™ ABSG 100G-10<br>TOYOLAC™ ABSG 100G-20<br>TOYOLAC™ ABSG 100G-30<br>TOYOLAC™ ABSG 100G-10T1   | TOYOLAC™ ASG-10<br>TOYOLAC™ ASG-20<br>TOYOLAC™ ASG-30  |
| <b>High Heat ABS</b>                        | TOYOLAC™ 440Y MH1<br>TOYOLAC™ 440Y MH5<br>TOYOLAC™ 450Y MH1<br>TOYOLAC™ 450Y MH5<br>TOYOLAC™ 450Y X10<br>TOYOLAC™ 470Y MH1<br>TOYOLAC™ 420Y MH1<br>TOYOLAC™ 460Y MH1 | TOYOLAC™ 440Y MH1 U<br>TOYOLAC™ 440Y MH5 U<br>TOYOLAC™ 450Y MH1 U<br>TOYOLAC™ 450Y MH5 U<br>TOYOLAC™ 450Y X10 U<br>TOYOLAC™ 470Y MH1 U<br>TOYOLAC™ 430Y MH1                  |
| <b>High Heat Glass Fiber Reinforced ABS</b> | TOYOLAC™ 450G-10R<br>TOYOLAC™ 450G-30R   | TOYOLAC™ 450G-20R<br>TOYOLAC™ 450G-20S   |
| <b>Chemical Resistant ABS</b>               | TOYOLAC™ AX05 X03<br>TOYOLAC™ AX05 X32   | TOYOLAC™ AX05 X03 U<br>TOYOLAC™ AX05 X32 U   |
| <b>Painting ABS</b>                         | TOYOLAC™ 100 MPF<br>TOYOLAC™ 100 MPJ<br>TOYOLAC™ 100 MPK   | TOYOLAC™ 100 MPM<br>TOYOLAC™ 100-MPH   |
| <b>High Heat Painting ABS</b>               | TOYOLAC™ 440Y X50  | TOYOLAC™ 450Y X50  |
| <b>Plating ABS</b>                          | TOYOLAC™ 315 X01<br>TOYOLAC™ 335 MPL   | TOYOLAC™ 325   |
| <b>AS</b>                                   | TOYOLAC™ A20C 333<br>TOYOLAC™ A21C 333   | TOYOLAC™ A37C 333<br>TOYOLAC™ A11C 333   |
| <b>Specialty Grades</b>                     | TOYOLAC™ 450Y BM1<br>TOYOLAC™ 500 MX2<br>TOYOLAC™ 700 SG5  | TOYOLAC™ 532 X02<br>TOYOLAC™ 500 MX2 U<br>TOYOLAC™ 700 SG5 U   |
| <b>Medical Grades</b>                       | TOYOLAC™ 500 322M  | TOYOLAC™ 250 X10M  |
| <b>Alloy Grades</b>                         | TOYOLAC™ PX10 X06<br>TOYOLAC™ PX10 X07<br>TOYOLAC™ RFX10 X01<br>TOYOLAC™ VX10G20   | TOYOLAC™ PX10 X06 U<br>TOYOLAC™ PX10 X07 U<br>TOYOLAC™ RFX10 X01 U   |
| <b>ASA</b>                                  | TOYOLAC™ TA10 X01<br>TOYOLAC™ TA10 X02<br>TOYOLAC™ TA30 X01<br>TOYOLAC™ TA30 X02<br>TOYOLAC™ TA50 X01  | TOYOLAC™ TA50 X02<br>TOYOLAC™ TA50C X50<br>TOYOLAC™ TA44 X50<br>TOYOLAC™ TA42C X01<br>TOYOLAC™ TA42 X02  |

\* Standard Black Color Code: B0, B1, B2, B3, B4, B6, SB1, SB2, K1, K2, K3, LB001, LB002 and LB003.

## List of Prohibited Chemical Substances

| No.  | CAS No./<br>Chemical Formula                    | Substance   |
|--|---|---|
| <b>Annex A : RoHS Directive 2011/65/EU and Directive (EU) 2015/863</b> |   |   |
| A01  | -   | Lead (Pb) and its compounds   |
| A02  | -   | Mercury (Hg) and its compounds  |
| A03  | -   | Cadmium (Cd) and its compounds  |
| A04  | -   | Hexavalent chromium (Cr <sup>6+</sup> ) compounds   |
| A05  | -   | Polybrominated biphenyls (PBB)  |
| A06  | -   | Polybrominated diphenyl ethers (PBDE)   |
| A07  | 117-81-7  | Bis(2-ethylhexyl) phthalate (DEHP)  |
| A08  | 85-68-7   | Benzyl butyl phthalate (BBP)  |
| A09  | 84-74-2   | Dibutyl phthalate (DBP)   |
| A10  | 84-69-5   | Diisobutyl phthalate (DIBP)   |
| <b>Annex B : REACH Regulation EC No. 1907/2006</b>                     |   |   |
| B01  | -   | (±)-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)                          |
| B02  | 96-18-4   | 1,2,3-trichloropropane  |
| B03  | 68515-51-5<br>68648-93-1                        | 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) |
| B04  | 71888-89-6                                      | 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich  |
| B05  | 68515-42-4                                      | 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters   |
| B06  | 68515-50-4                                      | 1,2-Benzenedicarboxylic acid, dihexylester, branched and linear   |
| B07  | 84777-06-0                                      | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear  |
| B08  | 112-49-2  | 1,2-bis(2-methoxyethoxy)ethane (TEGDME, triglyme)   |
| B09  | 107-06-2  | 1,2-Dichloroethane  |
| B10  | 629-14-1  | 1,2-Diethoxyethane  |
| B11  | 110-71-4  | 1,2-dimethoxyethane, ethylene glycol dimethyl ether (EGDME)   |
| B12  | 37853-59-1                                      | 1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]  |
| B13  | 2451-62-9                                       | 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)  |
| B14  | 59653-74-6                                      | 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)   |
| B15  | 1120-71-4                                       | 1,3-propanesultone  |
| B16  | 123-91-1  | 1,4-dioxane   |
| B17  | -   | 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™)  |
| B18  | 15087-24-8                                      | 1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one   |
| B19  | 106-94-5  | 1-bromopropane (n-propyl bromide)   |
| B20  | 872-50-4  | 1-Methyl-2-pyrrolidone (NMP)  |
| B21  | 1072-63-5                                       | 1-vinylimidazole  |
| B22  | 79-94-7   | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol  |
| B23  | 101-14-4  | 2,2'-dichloro-4,4'-methylenedianiline   |
| B24  | 6807-17-6                                       | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane   |
| B25  | 1522-92-5<br>3296-90-0<br>36483-57-5<br>96-13-9 | 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)     |
| B26  | -   | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides, covering any of their individual isomers and combinations thereof                     |
| B27  | 732-26-3  | 2,4,6-tri-tert-butylphenol  |
| B28  | 3864-99-1                                       | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)  |
| B29  | 121-14-2  | 2,4-Dinitrotoluene  |
| B30  | 25973-55-1                                      | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)  |
| B31  | 3147-75-9                                       | 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)  |
| B32  | 36437-37-3                                      | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)  |

## List of Prohibited Chemical Substances

| No. | CAS No./<br>Chemical Formula        | Substance   |
|-----|-------------------------------------|---|
| B33 | 80-54-6<br>75166-30-2<br>75166-31-3 | 2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers  |
| B34 | 119344-86-4                         | 2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one  |
| B35 | 3846-71-7                           | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)  |
| B36 | 119313-12-1                         | 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone   |
| B37 | 110-80-5                            | 2-Ethoxyethanol   |
| B38 | 111-15-9                            | 2-Ethoxyethyl acetate   |
| B39 | 15571-58-1                          | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)  |
| B40 | 90-04-0                             | 2-Methoxyaniline,o-Anisidine  |
| B41 | 109-86-4                            | 2-Methoxyethanol  |
| B42 | 110-49-6                            | 2-Methoxyethyl acetate  |
| B43 | 71868-10-5                          | 2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one  |
| B44 | 693-98-1                            | 2-methylimidazole   |
| B45 | 143860-04-2                         | 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine  |
| B46 | 101-77-9                            | 4,4'- Diaminodiphenylmethane (MDA)  |
| B47 | 77-40-7                             | 4,4'-(1-methylpropylidene)bisphenol   |
| B48 | 561-41-1                            | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]   |
| B49 | 90-94-8                             | 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)  |
| B50 | 80-05-7                             | 4,4'-isopropylidenediphenol   |
| B51 | 838-88-0                            | 4,4'-methylenedi-o-toluidine  |
| B52 | 101-80-4                            | 4,4'-oxydianiline and its salts   |
| B53 | 80-09-1                             | 4,4'-sulphonyldiphenol  |
| B54 | 140-66-9                            | 4-(1,1,3,3-tetramethylbutyl)phenol  |
| B55 | -                                   | 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]   |
| B56 | 60-09-3                             | 4-Aminoazobenzene   |
| B57 | -                                   | 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]                                   |
| B58 | 95-80-7                             | 4-methyl-m-phenylenediamine (toluene-2,4-diamine)   |
| B59 | -                                   | 4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]  |
| B60 | -                                   | 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] |
| B61 | 98-54-4                             | 4-tert-butylphenol  |
| B62 | -                                   | 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]   |
| B63 | 81-15-2                             | 5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)  |
| B64 | 119-47-1                            | 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol  |
| B65 | 120-71-8                            | 6-methoxy-m-toluidine (p-cresidine)   |
| B66 | 548-62-9                            | [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]  |

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| No.  | CAS No./<br>Chemical Formula | Substance   |
|------|------------------------------|---|
| B67  | 2580-56-5                    | [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]   |
| B68  | 69011-06-9                   | [Phthalato(2-)]dioxotrilead   |
| B69  | 51404-69-4                   | Acetic acid, lead salt, basic   |
| B70  | 7738-94-5<br>13530-68-2      | Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.   |
| B71  | 79-06-1                      | Acrylamide  |
| B72  | 85535-84-8                   | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)   |
| B73  | -                            | Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight |
| B74  | 7789-09-5                    | Ammonium dichromate   |
| B75  | 3825-26-1                    | Ammonium pentadecafluorooctanoate (APFO)  |
| B76  | 120-12-7                     | Anthracene  |
| B77  | 90640-80-5                   | Anthracene oil  |
| B78  | 90640-81-6                   | Anthracene oil, anthracene paste  |
| B79  | 91995-15-2                   | Anthracene oil, anthracene paste, anthracene fraction   |
| B80  | 91995-17-4                   | Anthracene oil, anthracene paste, distn. lights   |
| B81  | 90640-82-7                   | Anthracene oil, anthracene-low  |
| B82  | 7778-39-4                    | Arsenic acid  |
| B83  | 13701-59-2                   | Barium diboron tetraoxide   |
| B84  | 56-55-3<br>1718-53-2         | Benz[a]anthracene   |
| B85  | 552-30-7                     | Benzene-1,2,4-tricarboxylic acid 1,2 anhydride  |
| B86  | 50-32-8                      | Benzo[def]chrysene  |
| B87  | 191-24-2                     | Benzo[ghi]perylene  |
| B88  | 207-08-9                     | Benzo[k]fluoranthene  |
| B89  | 85-68-7                      | Benzyl butyl phthalate (BBP)  |
| B90  | 92-67-1                      | Biphenyl-4-ylamine  |
| B91  | 117-81-7                     | Bis (2-ethylhexyl)phthalate (DEHP)  |
| B92  | 143-24-8                     | Bis(2-(2-methoxyethoxy)ethyl) ether   |
| B93  | 26040-51-7                   | bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof  |
| B94  | 111-96-6                     | Bis(2-methoxyethyl) ether   |
| B95  | 117-82-8                     | Bis(2-methoxyethyl) phthalate   |
| B96  | 80-07-9                      | Bis(4-chlorophenyl) sulphone  |
| B97  | 1163-19-5                    | Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)   |
| B98  | 56-35-9                      | Bis(tributyltin) oxide (TBTO)   |
| B99  | 10043-35-3<br>11113-50-1     | Boric acid  |
| B100 | 3896-11-5                    | Bumetrizole (UV-326)  |
| B101 | 94-26-8                      | Butyl 4-hydroxybenzoate   |
| B102 | 7440-43-9                    | Cadmium   |
| B103 | 513-78-0                     | Cadmium Carbonate   |
| B104 | 10108-64-2                   | Cadmium chloride  |
| B105 | 7790-79-6                    | Cadmium fluoride  |
| B106 | 21041-95-2                   | Cadmium hydroxide   |

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| No.  | CAS No./<br>Chemical Formula         | Substance   |
|------|--------------------------------------|---|
| B107 | 10022-68-1<br>10325-94-7             | Cadmium nitrate   |
| B108 | 1306-19-0                            | Cadmium oxide   |
| B109 | 10124-36-4<br>31119-53-6             | Cadmium sulphate  |
| B110 | 1306-23-6                            | Cadmium sulphide  |
| B111 | 7778-44-1                            | Calcium arsenate  |
| B112 | 1333-82-0                            | Chromium trioxide   |
| B113 | 218-01-9<br>1719-03-5                | Chrysene  |
| B114 | 7646-79-9                            | Cobalt dichloride   |
| B115 | 513-79-1                             | Cobalt(II) carbonate  |
| B116 | 71-48-7                              | Cobalt(II) diacetate  |
| B117 | 10141-05-6                           | Cobalt(II) dinitrate  |
| B118 | 10124-43-3                           | Cobalt(II) sulphate   |
| B119 | 85-42-7<br>13149-00-3<br>14166-21-3  | Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry] |
| B120 | 541-02-6                             | Decamethylcyclopentasiloxane  |
| B121 | 1303-28-2                            | Diarsenic pentoxide   |
| B122 | 1327-53-3                            | Diarsenic trioxide  |
| B123 | 123-77-3                             | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)  |
| B124 | 1303-86-2                            | Diboron trioxide  |
| B125 | 84-74-2                              | Dibutyl phthalate (DBP)   |
| B126 | 22673-19-4                           | Dibutylbis(pentane-2,4-dionato-O,O')tin   |
| B127 | 683-18-1                             | Dibutyltin dichloride (DBTC)  |
| B128 | 24613-89-6                           | Dichromium tris(chromate)   |
| B129 | 84-61-7                              | Dicyclohexyl phthalate  |
| B130 | 64-67-5                              | Diethyl sulphate  |
| B131 | 84-75-3                              | Dihexyl phthalate   |
| B132 | 84-69-5                              | Diisobutyl phthalate  |
| B133 | 71850-09-4                           | Diisohexyl phthalate  |
| B134 | 605-50-5                             | Diisopentylphthalate  |
| B135 | 77-78-1                              | Dimethyl sulphate   |
| B136 | 88-85-7                              | Dinoseb (6-sec-butyl-2,4-dinitrophenol)   |
| B137 | -                                    | Diocetyl tin 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  |
| B138 | 12578-12-0                           | Dioxobis(stearato)trilead   |
| B139 | 131-18-0                             | Dipentyl phthalate (DPP)  |
| B140 | 75980-60-8                           | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide   |
| B141 | 573-58-0                             | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)  |
| B142 | 1937-37-7                            | 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)   |
| B143 | 12008-41-2                           | Disodium octaborate   |
| B144 | 1303-96-4<br>1330-43-4<br>12179-04-3 | Disodium tetraborate, anhydrous   |
| B145 | 540-97-6                             | Dodecamethylcyclohexasiloxane   |
| B146 | 107-15-3                             | Ethylenediamine   |
| B147 | 91031-62-8                           | Fatty acids, C16-18, lead salts   |
| B148 | 206-44-0<br>93951-69-0               | Fluoranthene  |
| B149 | 25214-70-4                           | Formaldehyde, oligomeric reaction products with aniline   |
| B150 | 75-12-7                              | Formamide   |

## List of Prohibited Chemical Substances

| No.  | CAS No./<br>Chemical Formula   | Substance  |
|------|--|--|
| B151 | 110-00-9   | Furan  |
| B152 | 111-30-8   | Glutaral   |
| B153 | 2058-94-8  | Henicosafuoroundecanoic acid   |
| B154 | 376-06-7   | Heptacosafuorotetradecanoic acid   |
| B155 | 25637-99-4<br>3194-55-6<br>134237-50-6<br>134237-51-7<br>134237-52-8 | Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified:<br>Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane   |
| B156 | 25550-51-0<br>19438-60-9<br>48122-14-1<br>57110-29-9                 | Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry] |
| B157 | 302-01-2<br>7803-57-8  | Hydrazine  |
| B158 | 96-45-7  | Imidazolidine-2-thione (2-imidazoline-2-thiol)   |
| B159 | 4247-02-3  | Isobutyl 4-hydroxybenzoate   |
| B160 | 7439-92-1  | Lead   |
| B161 | 13814-96-5   | Lead bis(tetrafluoroborate)  |
| B162 | 7758-97-6  | Lead chromate  |
| B163 | 12656-85-8   | Lead chromate molybdate sulphate red (C.I. Pigment Red 104)  |
| B164 | 20837-86-9   | Lead cyanamidate   |
| B165 | 301-04-2   | Lead di(acetate)   |
| B166 | 13424-46-9   | Lead diazide, Lead azide   |
| B167 | 10099-74-8   | Lead dinitrate   |
| B168 | 6477-64-1  | Lead dipicrate   |
| B169 | 7784-40-9  | Lead hydrogen arsenate   |
| B170 | 1317-36-8  | Lead monoxide (lead oxide)   |
| B171 | 12036-76-9   | Lead oxide sulfate   |
| B172 | 15245-44-0   | Lead styphnate   |
| B173 | 1344-37-2  | Lead sulfochromate yellow (C.I. Pigment Yellow 34)   |
| B174 | 12060-00-3   | Lead titanium trioxide   |
| B175 | 12626-81-2   | Lead titanium zirconium oxide  |
| B176 | 17570-76-2   | Lead(II) bis(methanesulfonate)   |
| B177 | -  | Medium-chain chlorinated paraffins (MCCP)  |
| B178 | 108-78-1   | Melamine   |
| B179 | 625-45-6   | Methoxyacetic acid   |
| B180 | 75-56-9  | Methyloxirane (Propylene oxide)  |
| B181 | 101-61-1   | N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)   |
| B182 | 127-19-5   | N,N-dimethylacetamide  |
| B183 | 68-12-2  | N,N-dimethylformamide  |
| B184 | 924-42-5   | N-(hydroxymethyl)acrylamide  |
| B185 | 79-16-3  | N-methylacetamide  |
| B186 | 776297-69-9  | N-pentyl-isopentylphthalate  |
| B187 | 98-95-3  | Nitrobenzene   |
| B188 | 335-76-2<br>3108-42-7<br>3830-45-3                                   | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts   |
| B189 | 97-56-3  | o-aminoazotoluene  |
| B190 | 95-53-4  | o-Toluidine  |
| B191 | 556-67-2   | Octamethylcyclotetrasiloxane   |
| B192 | -  | Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol   |
| B193 | 1314-41-6  | Orange lead (lead tetroxide)   |
| B194 | 13840-56-7   | Orthoboric acid, sodium salt   |
| B195 | 80-46-6  | p-(1,1-dimethylpropyl)phenol   |
| B196 | 72629-94-8   | Pentacosafuorotridecanoic acid   |
| B197 | 335-67-1   | Pentadecafluorooctanoic acid (PFOA)  |

## List of Prohibited Chemical Substances

| No.  | CAS No./<br>Chemical Formula        | Substance  |
|------|-------------------------------------|--|
| B198 | 12065-90-6                          | Pentalead tetraoxide sulphate  |
| B199 | 49663-84-5                          | Pentazinc chromate octahydroxide   |
| B200 | -                                   | Perfluorobutane sulfonic acid (PFBS) and its salts   |
| B201 | -                                   | Perfluoroheptanoic acid and its salts  |
| B202 | -                                   | Perfluorohexane-1-sulphonic acid and its salts   |
| B203 | 375-95-1<br>21049-39-8<br>4149-60-4 | Perfluorononan-1-oic-acid and its sodium and ammonium salts  |
| B204 | 85-01-8                             | Phenanthrene   |
| B205 | -                                   | Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)  |
| B206 | 77-09-8                             | Phenolphthalein  |
| B207 | 65996-93-2                          | Pitch, coal tar, high temp.  |
| B208 | 7789-00-6                           | Potassium chromate   |
| B209 | 7778-50-9                           | Potassium dichromate   |
| B210 | 11103-86-9                          | Potassium hydroxyoctaoxodizincatedichromate  |
| B211 | 129-00-0<br>1718-52-1               | Pyrene   |
| B212 | 8012-00-8                           | Pyrochlore, antimony lead yellow   |
| B213 | -                                   | 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  |
| B214 | -                                   | 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)   |
| B215 | -                                   | Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)  |
| B216 | 255881-94-8                         | S-(tricyclo(5.2.1.0'2,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate  |
| B217 | 68784-75-8                          | Silicic acid (H <sub>2</sub> SiO <sub>5</sub> ), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD),the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] |
| B218 | 11120-22-2                          | Silicic acid, lead salt  |
| B219 | 7775-11-3                           | Sodium chromate  |
| B220 | 7789-12-0<br>10588-01-9             | Sodium dichromate  |
| B221 | -                                   | Sodium perborate,perboric acid, sodium salt  |
| B222 | 7632-04-4                           | Sodium peroxometaborate  |
| B223 | 7789-06-2                           | Strontium chromate   |
| B224 | 62229-08-7                          | Sulfurous acid, lead salt, dibasic   |
| B225 | 61788-32-7                          | Terphenyl, hydrogenated  |
| B226 | 12267-73-1                          | Tetraboron disodium heptaoxide, hydrate  |
| B227 | 78-00-2                             | Tetraethyllead   |
| B228 | 12202-17-4                          | Tetralead trioxide sulphate  |
| B229 | 79-01-6                             | Trichloroethylene  |
| B230 | 307-55-1                            | Tricosafuorododecanoic acid  |
| B231 | 15606-95-8                          | Triethyl arsenate  |
| B232 | 1319-46-6                           | Trilead bis(carbonate) dihydroxide   |
| B233 | 3687-31-8                           | Trilead diarsenate   |
| B234 | 12141-20-7                          | Trilead dioxide phosphonate  |
| B235 | 115-96-8                            | Tris(2-chloroethyl)phosphate   |
| B236 | 1067-53-4                           | Tris(2-methoxyethoxy)vinylsilane   |
| B237 | -                                   | Tris(4-nonylphenyl, brached and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and liner (4-NP)   |
| B238 | 25155-23-1                          | Trixylyl phosphate   |

## List of Prohibited Chemical Substances

| No.   | CAS No./<br>Chemical Formula                  | Substance  |
|---|---|--|
| B239  | -   | Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm). c) alkaline oxide and alkali earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight |
| B240  | 6786-83-0                                     | α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]   |
| <b>Annex C : Phthalate Plasticizers 1999/815/EEC</b>  |   |  |
| C01   | 117-81-7                                      | Di(2-ethylhexyl) phthalate (DEHP)  |
| C02   | 26761-40-0                                    | Di-iso-decyl phthalate (DIDP)  |
| C03   | 28553-12-0                                    | Di-iso-nonyl phthalate (DINP)  |
| C04   | 84-74-2                                       | Di-n-butyl phthalate (DBP)   |
| C05   | 117-84-0                                      | Di-n-octyl phthalate (DNOP)  |
| C06   | 85-68-7                                       | Butyl benzyl phthalate (BBP)   |
| C07   | 84-75-3                                       | Di-n-hexyl phthalate (DNHP)  |
| <b>Annex D: Conflict Minerals</b>   |   |  |
| D01   | -   | Columbite-tantalite (Tantalum)   |
| D02   | -   | Cassiterite (Tin)  |
| D03   | -   | Wolframite (Tungsten)  |
| D04   | -   | Gold   |
| <b>Annex E1 : Montreal Protocol on Substances that Deplete the Ozone Layer (Document A)</b> |   |  |
| <b>Group I</b>  |   |  |
| E01   | CFCl <sub>3</sub>                             | Trichlorofluoromethane (CFC-11)  |
| E02   | CF <sub>2</sub> Cl <sub>2</sub>               | Dichlorodifluoromethane (CFC-12)   |
| E03   | C <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub> | Trichlorotrifluoroethane (CFC-113)   |
| E04   | C <sub>2</sub> F <sub>4</sub> Cl <sub>2</sub> | Dichlorotetrafluoroethane (CFC-114)  |
| E05   | C <sub>2</sub> F <sub>5</sub> Cl              | Chloropentafluoroethane (CFC-115)  |
| <b>Group II</b>   |   |  |
| E06   | CF <sub>2</sub> BrCl                          | Bromochlorodifluoromethane (Halon 1211)  |
| E07   | CF <sub>3</sub> Br                            | Bromotrifluoromethane (Halon 1301)   |
| E08   | C <sub>2</sub> F <sub>4</sub> Br <sub>2</sub> | Dibromotetrafluoroethane (Halon 2402)  |
| <b>Annex E2 : Montreal Protocol on Substances that Deplete the Ozone Layer (Document B)</b> |   |  |
| <b>Group I</b>  |   |  |
| E09   | CF <sub>3</sub> Cl                            | Chlorotrifluoromethane (CFC-13)  |
| E10   | C <sub>2</sub> FCl <sub>5</sub>               | Pentachlorofluoroethane (CFC-111)  |
| E11   | C <sub>2</sub> F <sub>2</sub> Cl <sub>4</sub> | Tetrachlorodifluoroethane (CFC-112)  |
| E12   | C <sub>3</sub> FCl <sub>7</sub>               | Heptachlorofluoropropane (CFC-211)   |
| E13   | C <sub>3</sub> F <sub>2</sub> Cl <sub>6</sub> | Hexachlorodifluoropropane (CFC-212)  |
| E14   | C <sub>3</sub> F <sub>3</sub> Cl <sub>5</sub> | Pentachlorotrifluoropropane (CFC-213)  |
| E15   | C <sub>3</sub> F <sub>4</sub> Cl <sub>4</sub> | Tetrachlorotetrafluoropropane (CFC-214)  |
| E16   | C <sub>3</sub> F <sub>5</sub> Cl <sub>3</sub> | Trichloropentafluoropropane (CFC-215)  |
| E17   | C <sub>3</sub> F <sub>6</sub> Cl <sub>2</sub> | Dichlorohexafluoropropane (CFC-216)  |
| E18   | C <sub>3</sub> F <sub>7</sub> Cl              | Chloroheptafluoropropane (CFC-217)   |
| <b>Group II</b>   |   |  |
| E19   | CCl <sub>4</sub>                              | Tetrachloromethane (Carbon tetrachloride)  |
| <b>Group III</b>  |   |  |
| E20   | C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub> | 1,1,1-Trichloroethane (Methyl chloroform)  |

## List of Prohibited Chemical Substances

| No.   | CAS No./<br>Chemical Formula                                 | Substance                               |
|---|--|---|
| <b>Annex E3 : Montreal Protocol on Substances that Deplete the Ozone Layer (Document C)</b> |  |   |
| <b>Group I</b>  |  |   |
| E21   | CHFC <sub>2</sub>  | Dichlorofluoromethane (HCFC-21)         |
| E22   | CHF <sub>2</sub> Cl  | Chlorodifluoromethane (HCFC-22)         |
| E23   | CH <sub>2</sub> FCl  | Chlorofluoromethane (HCFC-31)           |
| E24   | C <sub>2</sub> HFCl <sub>4</sub>                             | Tetrachlorofluoroethane (HCFC-121)      |
| E25   | C <sub>2</sub> HF <sub>2</sub> Cl <sub>3</sub>               | Trichlorofluoroethane (HCFC-122)        |
| E26   | C <sub>2</sub> HF <sub>3</sub> Cl <sub>2</sub>               | Dichlorotrifluoroethane (HCFC-123)      |
| E27   | CHCl <sub>2</sub> CF <sub>3</sub>                            | Dichlorotrifluoroethane (HCFC-123)      |
| E28   | C <sub>2</sub> HF <sub>4</sub> Cl                            | Chlorotetrafluoroethane (HCFC-124)      |
| E29   | CHFClCF <sub>3</sub>   | Chlorotetrafluoroethane (HCFC-124)      |
| E30   | C <sub>2</sub> H <sub>2</sub> FCl <sub>3</sub>               | Trichlorofluoroethane (HCFC-131)        |
| E31   | C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> | Dichlorodifluoroethane (HCFC-132)       |
| E32   | C <sub>2</sub> H <sub>2</sub> F <sub>3</sub> Cl              | Chlorotrifluoroethane (HCFC-133)        |
| E33   | C <sub>2</sub> H <sub>3</sub> FCl <sub>2</sub>               | Dichlorofluoroethane (HCFC-141)         |
| E34   | CH <sub>3</sub> CFCl <sub>2</sub>                            | Dichlorofluoroethane (HCFC-141b)        |
| E35   | C <sub>2</sub> H <sub>3</sub> F <sub>2</sub> Cl              | Chlorodifluoroethane (HCFC-142)         |
| E36   | CH <sub>3</sub> CF <sub>2</sub> Cl                           | Chlorodifluoroethane (HCFC-142b)        |
| E37   | C <sub>2</sub> H <sub>4</sub> FCl                            | Chlorofluoroethane (HCFC-151)           |
| E38   | C <sub>3</sub> HFCl <sub>6</sub>                             | Hexachlorofluoropropane (HCFC-221)      |
| E39   | C <sub>3</sub> HF <sub>2</sub> Cl <sub>5</sub>               | Pentachlorodifluoropropane (HCFC-222)   |
| E40   | C <sub>3</sub> HF <sub>3</sub> Cl <sub>4</sub>               | Tetrachlorotrifluoropropane (HCFC-223)  |
| E41   | C <sub>2</sub> HF <sub>4</sub> Cl <sub>3</sub>               | Trichlorotetrafluoropropane (HCFC-224)  |
| E42   | C <sub>3</sub> HF <sub>5</sub> Cl <sub>2</sub>               | Dichloropentafluoropropane (HCFC-225)   |
| E43   | CF <sub>3</sub> CF <sub>2</sub> CHCl <sub>2</sub>            | Dichloropentafluoropropane (HCFC-225ca) |
| E44   | CF <sub>2</sub> ClCF <sub>2</sub> CHClF                      | Dichloropentafluoropropane (HCFC-225cb) |
| E45   | C <sub>3</sub> HF <sub>6</sub> Cl                            | Chlorohexafluoropropane (HCFC-226)      |
| E46   | C <sub>3</sub> H <sub>2</sub> FCl <sub>5</sub>               | Pentachlorofluoropropane (HCFC-231)     |
| E47   | C <sub>3</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>4</sub> | Tetrachlorodifluoropropane (HCFC-232)   |
| E48   | C <sub>3</sub> H <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub> | Trichlorotrifluoropropane (HCFC-233)    |
| E49   | C <sub>3</sub> H <sub>2</sub> F <sub>4</sub> Cl <sub>2</sub> | Dichlorotetrafluoropropane (HCFC-234)   |
| E50   | C <sub>3</sub> H <sub>2</sub> F <sub>5</sub> Cl              | Chloropentafluoropropane (HCFC-235)     |
| E51   | C <sub>3</sub> H <sub>3</sub> FCl <sub>4</sub>               | Tetrachlorofluoropropane (HCFC-241)     |
| E52   | C <sub>3</sub> H <sub>3</sub> F <sub>2</sub> Cl <sub>3</sub> | Trichlorodifluoropropane (HCFC-242)     |
| E53   | C <sub>3</sub> H <sub>3</sub> F <sub>3</sub> Cl <sub>2</sub> | Dichlorotrifluoropropane (HCFC-243)     |
| E54   | C <sub>3</sub> H <sub>3</sub> F <sub>4</sub> Cl              | Chlorotetrafluoropropane (HCFC-244)     |
| E55   | C <sub>3</sub> H <sub>4</sub> FCl <sub>3</sub>               | Trichlorofluoropropane (HCFC-251)       |
| E56   | C <sub>3</sub> H <sub>4</sub> F <sub>2</sub> Cl <sub>2</sub> | Dichlorodifluoropropane (HCFC-252)      |
| E57   | C <sub>3</sub> H <sub>4</sub> F <sub>3</sub> Cl              | Chlorotrifluoropropane (HCFC-253)       |
| E58   | C <sub>3</sub> H <sub>5</sub> FCl <sub>2</sub>               | Dichlorofluoropropane (HCFC-261)        |
| E59   | C <sub>3</sub> H <sub>5</sub> F <sub>2</sub> Cl              | Chlorodifluoropropane (HCFC-262)        |
| E60   | C <sub>3</sub> H <sub>6</sub> FCl                            | Chlorofluoropropane (HCFC-271)          |
| <b>Group II</b>   |  |   |
| E61   | CHFBr <sub>2</sub>   | Dibromo-fluoromethane                   |
| E62   | CHF <sub>2</sub> Br  | Dibromo-difluoromethane                 |
| E63   | C <sub>2</sub> HF <sub>2</sub> Br <sub>3</sub>               | Tribromo-difluoroethane                 |
| E64   | C <sub>2</sub> HF <sub>4</sub> Br                            | Bromo-tetrafluoroethane                 |
| E65   | C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Br <sub>2</sub> | Dibromo-difluoroethane                  |
| E66   | C <sub>2</sub> H <sub>3</sub> FBr <sub>2</sub>               | Dibromo-fluoroethane                    |
| E67   | C <sub>2</sub> H <sub>4</sub> FBr                            | Bromofluoroethane                       |
| E68   | C <sub>3</sub> HF <sub>2</sub> Br <sub>5</sub>               | Pentabromo-difluoropropane              |
| E69   | C <sub>3</sub> HF <sub>4</sub> Br <sub>3</sub>               | Tribromo-tetrafluoropropane             |
| E70   | C <sub>3</sub> HF <sub>6</sub> Br                            | Bromo-hexafluoropropane                 |

## List of Prohibited Chemical Substances

| No.   | CAS No./<br>Chemical Formula                                 | Substance  |
|---|--|--|
| E71   | C <sub>3</sub> H <sub>2</sub> F <sub>2</sub> Br <sub>4</sub> | Tetrabromo-fluoropropane   |
| E72   | C <sub>3</sub> H <sub>2</sub> F <sub>4</sub> Br <sub>2</sub> | Dibromo-tetrafluoropropane   |
| E73   | C <sub>3</sub> H <sub>3</sub> FBr <sub>4</sub>               | Tetrabromo-fluoropropane   |
| E74   | C <sub>3</sub> H <sub>3</sub> F <sub>3</sub> Br <sub>2</sub> | Dibromo-trifluoropropane   |
| E75   | C <sub>3</sub> H <sub>4</sub> FBr <sub>3</sub>               | Tribromo-fluoropropane   |
| E76   | C <sub>3</sub> H <sub>4</sub> F <sub>3</sub> Br              | Bromo-trifluoropropane   |
| E77   | C <sub>3</sub> H <sub>5</sub> F <sub>2</sub> Br              | Bromo-difluoropropane  |
| E78   | CH <sub>2</sub> FBr  | Bromo-fluoromethane  |
| E79   | C <sub>2</sub> HFBBr <sub>4</sub>                            | Tetrabromo-fluoroethane  |
| E80   | C <sub>2</sub> HF <sub>3</sub> Br <sub>2</sub>               | Dibromo-trifluoroethane  |
| E81   | C <sub>2</sub> H <sub>2</sub> FBr <sub>3</sub>               | Tribromo-fluoroethane  |
| E82   | C <sub>2</sub> H <sub>2</sub> F <sub>3</sub> Br              | Bromo-trifluoroethane  |
| E83   | C <sub>2</sub> H <sub>3</sub> F <sub>2</sub> Br              | Bromo-difluoroethane   |
| E84   | C <sub>3</sub> HFBBr <sub>6</sub>                            | Hexabromo-fluoropropane  |
| E85   | C <sub>3</sub> HF <sub>3</sub> Br <sub>4</sub>               | Tetrabromo-trifluoropropane  |
| E86   | C <sub>3</sub> HF <sub>5</sub> Br <sub>2</sub>               | Dibromo-pentafluoropropane   |
| E87   | C <sub>3</sub> H <sub>2</sub> FBr <sub>5</sub>               | Pentabromo-fluoropropane   |
| E88   | C <sub>3</sub> H <sub>2</sub> F <sub>3</sub> Br <sub>3</sub> | Tribromo-trifluoropropane  |
| E89   | C <sub>3</sub> H <sub>2</sub> F <sub>5</sub> Br              | Bromo-pentafluoropropane   |
| E90   | C <sub>3</sub> H <sub>3</sub> F <sub>2</sub> Br <sub>3</sub> | Tribromo-difluoropropane   |
| E91   | C <sub>3</sub> H <sub>3</sub> F <sub>4</sub> Br              | Bromo-tetrafluoropropane   |
| E92   | C <sub>3</sub> H <sub>4</sub> F <sub>2</sub> Br <sub>2</sub> | Dibromo-difluoropropane  |
| E93   | C <sub>3</sub> H <sub>5</sub> FBr <sub>2</sub>               | Dibromo-fluoropropane  |
| E94   | C <sub>3</sub> H <sub>6</sub> FBr                            | Bromo-fluoropropane  |
| <b>Group III</b>  |  |  |
| E95   | CH <sub>2</sub> BrCl   | Bromochloromethane   |
| <b>Annex E4 : Montreal Protocol on Substances that Deplete the Ozone Layer (Document E)</b> |  |  |
| E96   | CH <sub>3</sub> Br   | Bromomethane   |
| <b>Annex F: Azo Dyes and Pigments Forming Specified Amines 2002/61/EC</b>                   |  |  |
| F01   | 60-09-3  | 4-Amino azobenzene   |
| F02   | 90-04-0  | o-Anisidine<br>2-Methoxyaniline  |
| F03   | 91-59-8  | 2-Naphthylamine  |
| F04   | 91-94-1  | 3,3'-Dichlorobenzidine<br>3,3'-Dichlorobiphenyl-4,4'-ylenediamine                |
| F05   | 92-67-1  | Biphenyl-4-ylamine<br>4-Aminobiphenyl<br>Xenylamine                              |
| F06   | 92-87-5  | Benzidine  |
| F07   | 95-53-4  | o-Toluidine<br>2-Aminotoluene  |
| F08   | 95-69-2  | 4-Chloro-o-toluidine   |
| F09   | 95-80-7  | 4-Methyl-m-phenylenediamine  |
| F10   | 97-56-3  | o-Aminoazotoluene<br>4-Amino-2',3-dimethylazobenzene<br>4-o-Tolylazo-o-toluidine |
| F11   | 99-55-8  | 5-Nitro-o-toluidine  |
| F12   | 101-14-4   | 4,4'-Methylene-bis-(2-chloro-aniline)<br>2,2'-Dichloro-4,4'-methylene-dianiline  |
| F13   | 101-77-9   | 4,4'-Methylenedianiline<br>4,4'-Diaminodiphenylmethane                           |
| F14   | 101-80-4   | 4,4'-Oxydianiline  |
| F15   | 106-47-8   | 4-Chloroaniline  |
| F16   | 119-90-4   | 3,3'-Dimethoxybenzidine<br>o-Dianisi-dine  |

## List of Prohibited Chemical Substances

| No.   | CAS No./<br>Chemical Formula | Substance  |
|---|------------------------------|--|
| F17   | 119-93-7                     | 3,3'-Dimethylbenzidine<br>4,4'-Bi-o-toluidine  |
| F18   | 120-71-8                     | 6-Methoxy-m-toluidine<br>p-Cresidine   |
| F19   | 137-17-7                     | 2,4,5-Trimethylaniline   |
| F20   | 139-65-1                     | 4,4'-Thiodianiline   |
| F21   | 615-05-4                     | 4-Methoxy-m-phenylenediamine   |
| F22   | 838-88-0                     | 4,4'-Methylenedi-o-toluidine   |
| <b>Annex G: Level 1 TPM Prohibited Substances</b> |                              |  |
| G01   | 107-06-2                     | 1,2-Dichloroethane   |
| G02   | 542-75-6                     | 1,3-Dichloropropene (Telone)   |
| G03   | 3173-72-6                    | 1,5-Naphthalene diisocyanate   |
| G04   | -                            | 2,2,3,3,4,5,5-Heptafluoro-4-(perfluorobutyl)oxolane or 2,2,3,3,4,4,5-Heptafluoro-4-(perfluorobutyl)oxolane   |
| G05   | 3846-71-7                    | 2-(2H-1,2,3-benzotriazole-2-yl)-4,6-di-tert-butylphenol  |
| G06   | 732-26-3                     | 2,4,6-Tri-tert-butylphenol   |
| G07   | 80-05-7                      | 4,4'-Dihydroxy-2,2-diphenylpropane (Bisphenol A)   |
| G08   | 92-93-3                      | 4-Nitrobiphenyls   |
| G09   | 309-00-2                     | Aldrin (= 1 $\alpha$ ,2,3,4 $\alpha$ ,10,10-Hexachloro-1,4,4a $\beta$ ,5 $\beta$ ,8 $\beta$ ,8a $\beta$ -hexahydro-1 $\beta$ ,4 $\beta$ :5 $\alpha$ ,8 $\alpha$ -dimethanonaphthalene) |
| G10   | 12172-73-5                   | Amosit   |
| G11   | 1331-21-4                    | Asbestos   |
| G12   | -                            | Azo compounds (Compounds that might produce substances in Annex F after degradation)   |
| G13   | 71-43-2                      | Benzene  |
| G14   | -                            | Beryllium (Be) and its compounds   |
| G15   | 542-88-1                     | Bis(chloromethyl) ether  |
| G16   | 57-74-9                      | Chlordane  |
| G17   | 3734-48-3,<br>76-44-8        | Chlordene or Heptachlor and their mixture  |
| G18   | -                            | Chlorinated paraffin   |
| G19   | 108-90-7                     | Chlorobenzene  |
| G20   | 2921-88-2                    | Chlorpyrifos (= Phosphorothioic acid O,O-diethyl O-(3,5,6-trichloro-2-pyridyl))  |
| G21   | 156-59-2                     | Cis-1,2-dichloroethylene   |
| G22   | -                            | Cobalt (Co) and its compounds  |
| G23   | 12001-28-4                   | Crocidolite  |
| G24   | 50-29-3                      | DDT (4,4'-Dichlorodiphenyltrichloroethane)   |
| G25   | -                            | Dibutyltin (DBT) compounds   |
| G26   | 75-09-2                      | Dichloromethane  |
| G27   | 115-32-2                     | Dicofol  |
| G28   | 60-57-1                      | Dieldrin   |
| G29   | 84-66-2                      | Diethyl phthalate  |
| G30   | 624-49-7                     | Dimethyl fumarate (DMF)  |
| G31   | -                            | Diocetyl tin (DOT) compounds   |
| G32   | 72-20-8                      | Endrin   |
| G33   | 106-89-8                     | Epichlorohydrin  |
| G34   | 50-00-0                      | Formaldehyde   |
| G35   | 118-74-1                     | Hexachlorobenzene  |
| G36   | 87-68-3                      | Hexachlorobutadiene  |
| G37   | 2385-85-5                    | Mirex  |
| G38   | -                            | N,N'-ditolyl-p-phenylenediamine  |
| G39   | -                            | N,N'-dixylol-p-phenylenediamine  |
| G40   | 91-20-3                      | Naphthalene  |
| G41   | 7440-02-0                    | Nickel (Ni) and its compounds  |
| G42   | -                            | N-tolyl-N-xylol-p-phenylenediamine   |
| G43   | 27417-40-9,                  | N,N'-Ditolyl-p-phenylenediamine compounds or N-(Dimethylphenyl)-N'-(tolylphenyl)-p-phenylenediamine compounds or N,N'-bis(Dimethylphenyl)-p-phenylenediamine compounds                 |

## List of Prohibited Chemical Substances

| No. | CAS No./<br>Chemical Formula | Substance  |
|-----|------------------------------|--|
| G44 | -                            | Hydrofluorocarbons (HFC) and Perfluorocarbons (PFC)                  |
| G45 | -                            | Organic brominated compounds other than PBB and PBDE                 |
| G46 | 14797-73-0                   | Perchlorate  |
| G47 | 1763-23-1                    | Perfluorooctane sulfonate and its salts (PFOS)                       |
| G48 | 335-67-1                     | Perfluorooctanoic acid   |
| G49 | 307-55-1                     | Perfluorododecanoic acid   |
| G50 | 72629-94-8                   | Perfluorotridecanoic acid  |
| G51 | 376-06-7                     | Perfluorotetradecanoic acid  |
| G52 | -                            | Perfluoropentadecanoic acid  |
| G53 | 67905-19-5                   | Perfluorohexadecanoic acid   |
| G54 | 335-57-9                     | Perfluoroheptane   |
| G55 | 307-34-6                     | Perfluorooctane  |
| G56 | -                            | Polychlorinated biphenyls (PCB)                                      |
| G57 | -                            | Polychlorinated naphthalene (PCN) (3 or more chlorine atoms)         |
| G58 | 61788-33-8                   | Polychlorinated terphenyls (PCT)                                     |
| G59 | -                            | Polycyclic aromatic hydrocarbons (PAH)                               |
| G60 | -                            | Polyvinylchloride (PVC) and its mixtures                             |
| G61 | -                            | Radioactive substances   |
| G62 | -                            | Rubber cement containing benzene beyond 5wt%                         |
| G63 | 2551-62-4                    | Sulfur hexafluoride (SF6)  |
| G64 | 127-18-4                     | Tetrachloroethylene (Perchloroethylene)                              |
| G65 | 12185-10-3                   | Yellow phosphorus  |
| G66 | 62-56-6                      | Thiourea   |
| G67 | 8001-35-2                    | Toxaphene  |
| G68 | -                            | Tributyl tin compounds and Triphenyl tin compounds                   |
| G69 | 13674-84-5                   | Tris(1-chloro-2-propyl)phosphate (TCPP)                              |
| G70 | 13674-87-8                   | Tris(1,3-dichloro-2-propyl)phosphate (TDCP)                          |
| G71 | 75-01-4                      | Vinyl chloride   |
| G72 | 75-35-4                      | Vinylidene chloride  |
| G73 | 1330-20-7                    | Xylene   |
| G74 | 7723-14-0                    | Red phosphorus   |
| G75 | 3864-99-1                    | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)       |
| G76 | 3846-71-7                    | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)                 |
| G77 | 25973-55-1                   | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)             |
| G78 | 36437-37-3                   | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) |
| G79 | 68937-41-7                   | Phenol, isopropylated phosphate (3:1) (PIP (3:1))                    |
| G80 | 133-49-3                     | Pentachlorothiophenol (PCTP)   |