



# Declaration for Substances of Very High Concern (REACH)

Regulation (EC) No 1907/2006, SVHC list 197 substances updated 15 JAN 2019

Date of Declaration: June 08, 2019

Device Part Number: EFR32FG12P231F1024GM48-C

| ID | Substance Name                                                                                                                                                                    | EC<br>Number(s)  <br>CAS<br>Numbers(s)                | Reason for Inclusion<br>on List                                                                     | Contained<br>in Device |    | Total Weight<br>(mg)<br>per Device<br>(If Contained) |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------|----|------------------------------------------------------|
|    |                                                                                                                                                                                   |                                                       |                                                                                                     | Yes                    | No |                                                      |
| 1  | 1,2,3-Trichloropropane                                                                                                                                                            | 202-486-1  <br>96-18-4                                | Carcinogenic and toxic for<br>reproduction (articles 57 a and<br>57 c)                              |                        | X  |                                                      |
| 2  | 1,2-Benzenedicarboxylic acid, di-C6-8-<br>branched alkyl esters, C7-rich                                                                                                          | 276-158-1  <br>71888-89-6                             | Toxic for reproduction (article<br>57c)                                                             |                        | X  |                                                      |
| 3  | 1,2-Benzenedicarboxylic acid, di-C7-11-<br>branched and linear alkyl esters                                                                                                       | 271-084-6  <br>68515-42-4                             | Toxic for reproduction (article<br>57c)                                                             |                        | X  |                                                      |
| 4  | 1,2-dichloroethane                                                                                                                                                                | 203-458-1  <br>107-06-2                               | Carcinogenic (article 57 a)                                                                         |                        | X  |                                                      |
| 5  | 1-Methyl-2-pyrrolidone                                                                                                                                                            | 212-828-1  <br>872-50-4                               | Toxic for reproduction (article<br>57c)                                                             |                        | X  |                                                      |
| 6  | 2,2'-dichloro-4,4'-methylenedianiline                                                                                                                                             | 202-918-9  <br>101-14-4                               | Carcinogenic (article 57 a)                                                                         |                        | X  |                                                      |
| 7  | 2,4-Dinitrotoluene                                                                                                                                                                | 204-450-0  <br>121-14-2                               | Carcinogenic (article 57a)                                                                          |                        | X  |                                                      |
| 8  | 2-Ethoxyethanol                                                                                                                                                                   | 203-804-1  <br>110-80-5                               | Toxic for reproduction (article<br>57c)                                                             |                        | X  |                                                      |
| 9  | 2-Ethoxyethyl acetate                                                                                                                                                             | 203-839-2  <br>111-15-9                               | Toxic for reproduction (article<br>57c)                                                             |                        | X  |                                                      |
| 10 | 2-Methoxyaniline; o-Anisidine                                                                                                                                                     | 201-963-1  <br>90-04-0                                | Carcinogenic (article 57 a)                                                                         |                        | X  |                                                      |
| 11 | 2-Methoxyethanol                                                                                                                                                                  | 203-713-7  <br>109-86-4                               | Toxic for reproduction (article<br>57c)                                                             |                        | X  |                                                      |
| 12 | 4-(1,1,3,3-tetramethylbutyl)phenol                                                                                                                                                | 205-426-2  <br>140-66-9                               | Equivalent level of concern<br>having probable serious effects<br>to the environment (article 57 f) |                        | X  |                                                      |
| 13 | 4,4'- Diaminodiphenylmethane (MDA)                                                                                                                                                | 202-974-4  <br>101-77-9                               | Carcinogenic (article 57a)                                                                          |                        | X  |                                                      |
| 14 | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk<br>xylene)                                                                                                                             | 201-329-4  <br>81-15-2                                | vPvB (article 57e)                                                                                  |                        | X  |                                                      |
| 15 | Acids generated from chromium trioxide and<br>their oligomers. Group containing: Chromic<br>acid, Dichromic acid, Dichromic acid,<br>Oligomers of chromic acid and dichromic acid | 231-801-5,<br>236-881-5  <br>7738-94-5,<br>13530-68-2 | Carcinogenic (article 57a)                                                                          |                        | X  |                                                      |
| 16 | Acrylamide                                                                                                                                                                        | 201-173-7                                             | Carcinogenic and mutagenic                                                                          |                        | X  |                                                      |

|    |                                                             |                                               |                                                                                                                                                    |  |   |  |
|----|-------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--|---|--|
|    |                                                             | 79-06-1                                       | (articles 57 a and 57 b)                                                                                                                           |  |   |  |
| 17 | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) | 287-476-5   85535-84-8                        | PBT and vPvB (articles 57 d and 57 e)                                                                                                              |  | X |  |
| 18 | Aluminosilicate Refractory Ceramic Fibres                   | NA   Extracted from Index no.: 650-017-00-8   | Carcinogenic (article 57 a)                                                                                                                        |  | X |  |
| 19 | Ammonium dichromate                                         | 232-143-1   7789-09-5                         | Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)                                                                  |  | X |  |
| 20 | Anthracene                                                  | 204-371-1   120-12-7                          | PBT (article 57d)                                                                                                                                  |  | X |  |
| 21 | Anthracene oil                                              | 292-602-7   90640-80-5                        | Carcinogenic1, PBT and vPvB (articles 57a, 57d and 57e)                                                                                            |  | X |  |
| 22 | Anthracene oil, anthracene paste                            | 292-603-2   90640-81-6                        | Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)                                                                           |  | X |  |
| 23 | Anthracene oil, anthracene paste, anthracene fraction       | 295-275-9   91995-15-2                        | Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)                                                                           |  | X |  |
| 24 | Anthracene oil, anthracene paste, distn. lights             | 295-278-5   91995-17-4                        | Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)                                                                           |  | X |  |
| 25 | Anthracene oil, anthracene-low                              | 292-604-8   90640-82-7                        | Carcinogenic2, mutagenic3, PBT and vPvB (articles 57a, 57b, 57d and 57e)                                                                           |  | X |  |
| 26 | Arsenic acid                                                | 231-901-9   7778-39-4                         | Carcinogenic (article 57 a)                                                                                                                        |  | X |  |
| 27 | Benzyl butyl phthalate (BBP)                                | 201-622-7   85-68-7                           | Toxic for reproduction (article 57c)                                                                                                               |  | X |  |
| 28 | Bis (2-ethylhexyl)phthalate (DEHP)                          | 204-211-0   117-81-7                          | 2014 addition: Equivalent level of concern having probable serious effects to the environment (Article 57 f); Toxic for reproduction (article 57c) |  | X |  |
| 29 | Bis(2-methoxyethyl) ether                                   | 203-924-4   111-96-6                          | Toxic for reproduction (article 57 c)                                                                                                              |  | X |  |
| 30 | Bis(2-methoxyethyl) phthalate                               | 204-212-6   117-82-8                          | Toxic for reproduction (article 57 c)                                                                                                              |  | X |  |
| 31 | Bis(tributyltin)oxide (TBTO)                                | 200-268-0   56-35-9                           | PBT (article 57d)                                                                                                                                  |  | X |  |
| 32 | Boric acid                                                  | 233-139-2, 234-343-4   10043-35-3, 11113-50-1 | Toxic for reproduction (article 57 c)                                                                                                              |  | X |  |
| 33 | Calcium arsenate                                            | 231-904-5   7778-44-1                         | Carcinogenic (article 57 a)                                                                                                                        |  | X |  |
| 34 | Chromium trioxide                                           | 215-607-8                                     | Carcinogenic and mutagenic                                                                                                                         |  | X |  |

|    |                                                                                                                                                                 |                                                                                                             |                                                                  |  |   |  |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|---|--|
|    |                                                                                                                                                                 | 1333-82-0                                                                                                   | (articles 57 a and 57 b)                                         |  |   |  |
| 35 | Cobalt dichloride                                                                                                                                               | 231-589-4  <br>7646-79-9                                                                                    | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
| 36 | Cobalt(II) carbonate                                                                                                                                            | 208-169-4  <br>513-79-1                                                                                     | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
| 37 | Cobalt(II) diacetate                                                                                                                                            | 200-755-8  <br>71-48-7                                                                                      | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
| 38 | Cobalt(II) dinitrate                                                                                                                                            | 233-402-1  <br>10141-05-6                                                                                   | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
| 39 | Cobalt(II) sulphate                                                                                                                                             | 233-334-2  <br>10124-43-3                                                                                   | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
| 40 | Diarsenic pentaoxide                                                                                                                                            | 215-116-9  <br>1303-28-2                                                                                    | Carcinogenic (article 57a)                                       |  | X |  |
| 41 | Diarsenic trioxide                                                                                                                                              | 215-481-4  <br>1327-53-3                                                                                    | Carcinogenic (article 57a)                                       |  | X |  |
| 42 | Dibutyl phthalate (DBP)                                                                                                                                         | 201-557-4  <br>84-74-2                                                                                      | Toxic for reproduction (article 57c)                             |  | X |  |
| 43 | Dichromium tris(chromate)                                                                                                                                       | 246-356-2  <br>24613-89-6                                                                                   | Carcinogenic (article 57 a)                                      |  | X |  |
| 44 | Diisobutyl phthalate                                                                                                                                            | 201-553-2  <br>84-69-5                                                                                      | Toxic for reproduction (article 57c)                             |  | X |  |
| 45 | Disodium tetraborate, anhydrous                                                                                                                                 | 215-540-4  <br>1303-96-4,<br>1330-43-4,<br>12179-04-3                                                       | Toxic for reproduction (article 57 c)                            |  | X |  |
| 46 | Formaldehyde, oligomeric reaction products with aniline                                                                                                         | 500-036-1  <br>25214-70-4                                                                                   | Carcinogenic (article 57 a)                                      |  | X |  |
| 47 | Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane | 247-148-4 and<br>221-695-9  <br>25637-99-4,<br>3194-55-6<br>(134237-50-6)<br>(134237-51-7)<br>(134237-52-8) | PBT (article 57d)                                                |  | X |  |
| 48 | Hydrazine                                                                                                                                                       | 206-114-9  <br>302-01-2,<br>7803-57-8                                                                       | Carcinogenic (article 57a)                                       |  | X |  |
| 49 | Lead chromate                                                                                                                                                   | 231-846-0  <br>7758-97-6                                                                                    | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
| 50 | Lead chromate molybdate sulphate red (C.I. Pigment Red 104)                                                                                                     | 235-759-9  <br>12656-85-8                                                                                   | Carcinogenic and toxic for reproduction (articles 57 a and 57 c) |  | X |  |
|    |                                                                                                                                                                 |                                                                                                             |                                                                  |  |   |  |

|    |                                                    |                                   |                                                                                   |  |   |  |
|----|----------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------|--|---|--|
| 51 | Lead diazide, Lead azide                           | 236-542-1   13424-46-9            | Toxic for reproduction (article 57 c),                                            |  | X |  |
| 52 | Lead dipicrate                                     | 229-335-2   6477-64-1             | Toxic for reproduction (article 57 c)                                             |  | X |  |
| 53 | Lead hydrogen arsenate                             | 232-064-2   7784-40-9             | Carcinogenic and toxic for reproduction (articles 57 a and 57 c)                  |  | X |  |
| 54 | Lead styphnate                                     | 239-290-0   15245-44-0            | Toxic for reproduction (article 57 c)                                             |  | X |  |
| 55 | Lead sulfochromate yellow (C.I. Pigment Yellow 34) | 215-693-7   1344-37-2             | Carcinogenic and toxic for reproduction (articles 57 a and 57 c))                 |  | X |  |
| 56 | N,N-dimethylacetamide                              | 204-826-4   127-19-5              | Toxic for reproduction (article 57 c)                                             |  | X |  |
| 57 | Pentazinc chromate octahydroxide                   | 256-418-0   49663-84-5            | Carcinogenic (article 57 a)                                                       |  | X |  |
| 58 | Phenolphthalein                                    | 201-004-7   77-09-8               | Carcinogenic (article 57 a)                                                       |  | X |  |
| 59 | Pitch, coal tar, high temp.                        | 266-028-2   65996-93-2            | Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)                            |  | X |  |
| 60 | Potassium chromate                                 | 232-140-5   7789-00-6             | Carcinogenic and mutagenic (articles 57 a and 57 b).                              |  | X |  |
| 61 | Potassium dichromate                               | 231-906-6   7778-50-9             | Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c) |  | X |  |
| 62 | Potassium hydroxyoctaoxodizincatedichromate        | 234-329-8   11103-86-9            | Carcinogenic (article 57 a)                                                       |  | X |  |
| 63 | Sodium chromate                                    | 231-889-5   7775-11-3             | Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c) |  | X |  |
| 64 | Sodium dichromate                                  | 234-190-3   7789-12-0, 10588-01-9 | Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)    |  | X |  |
| 65 | Strontium chromate                                 | 232-142-6   7789-06-2             | Carcinogenic (article 57a)                                                        |  | X |  |
| 66 | Tetraboron disodium heptaoxide, hydrate            | 235-541-3   12267-73-1            | Toxic for reproduction (article 57 c)                                             |  | X |  |
| 67 | Trichloroethylene                                  | 201-167-4   79-01-6               | Carcinogenic (article 57 a)                                                       |  | X |  |
| 68 | Triethyl arsenate                                  | 427-700-2   15606-95-8            | Carcinogenic (article 57a)                                                        |  | X |  |
| 69 | Trilead diarsenate                                 | 222-979-5   3687-31-8             | Carcinogenic and toxic for reproduction (articles 57 a and 57 c)                  |  | X |  |
| 70 | Tris(2-chloroethyl)phosphate                       | 204-118-5   115-96-8              | Toxic for reproduction (article 57c)                                              |  | X |  |
|    |                                                    |                                   |                                                                                   |  |   |  |

|    |                                                                                                                                                                                                                                  |                                            |                                         |  |   |  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------|--|---|--|
| 71 | Zirconia Aluminosilicate Refractory Ceramic Fibres                                                                                                                                                                               | NA   Extracted from Index no. 650-017-00-8 | Carcinogenic (article 57 a)             |  | X |  |
| 72 | , -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)]                                              | 229-851-8   6786-83-0                      | Carcinogenic (Article 57a)              |  | X |  |
| 73 | N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)                                                                                                                                                                   | 202-959-2   101-61-1                       | Carcinogenic (Article 57a)              |  | X |  |
| 74 | 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (-TGIC)                                                                                                                                           | 423-400-0   59653-74-6                     | Mutagenic (Article 57b)                 |  | X |  |
| 75 | Diboron trioxide                                                                                                                                                                                                                 | 215-125-8   1303-86-2                      | Toxic for reproduction (Article 57 c)   |  | X |  |
| 76 | 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)                                                                                                                                                                                | 203-977-3   112-49-2                       | Toxic for reproduction (Article 57 c)   |  | X |  |
| 77 | 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)]                                                                                  | 209-218-2   561-41-1                       | Carcinogenic (Article 57a)              |  | X |  |
| 78 | Lead(II) bis(methanesulfonate)                                                                                                                                                                                                   | 401-750-5   17570-76-2                     | Toxic for reproduction (Article 57 c)   |  | X |  |
| 79 | Formamide                                                                                                                                                                                                                        | 200-842-0   75-12-7                        | Toxic for reproduction (Article 57 c)   |  | X |  |
| 80 | [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)]                 | 208-953-6   548-62-9                       | Carcinogenic (Article 57a)              |  | X |  |
| 81 | 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)                                                                                                                                                                      | 203-794-9   110-71-4                       | Toxic for reproduction (Article 57 c)   |  | X |  |
| 82 | [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)] | 219-943-6   2580-56-5                      | Carcinogenic (Article 57a)              |  | X |  |
| 83 | 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)                                                                                                                                                               | 219-514-3   2451-62-9                      | Mutagenic (Article 57b)                 |  | X |  |
| 84 | 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)                                                                                                                                                                           | 202-027-5   90-94-8                        | Carcinogenic (Article 57a)              |  | X |  |
| 85 | Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)                                                                                                                                                                   | 214-604-9   1163-19-5                      | PBT (Article 57 d); vPvB (Article 57 e) |  | X |  |
| 86 | Pentacosfluorotridecanoic acid                                                                                                                                                                                                   | 276-745-2   72629-94-8                     | vPvB (Article 57 e)                     |  | X |  |
| 87 | Tricosfluorododecanoic acid                                                                                                                                                                                                      | 206-203-2   307-55-1                       | vPvB (Article 57 e)                     |  | X |  |
|    |                                                                                                                                                                                                                                  |                                            |                                         |  |   |  |

|     |                                                                  |                           |                                                                                            |  |   |  |
|-----|------------------------------------------------------------------|---------------------------|--------------------------------------------------------------------------------------------|--|---|--|
| 88  | Henicosafuoroundecanoic acid                                     | 218-165-4  <br>2058-94-8  | vPvB (Article 57 e)                                                                        |  | X |  |
| 89  | Heptacosafuorotetradecanoic acid                                 | 206-803-4  <br>376-06-7   | vPvB (Article 57 e)                                                                        |  | X |  |
| 90  | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))                | 204-650-8  <br>123-77-3   | Equivalent level of concern having probable serious effects to human health (Article 57 f) |  | X |  |
| 91  | Methoxyacetic acid                                               | 210-894-6  <br>625-45-6   | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 92  | N,N-dimethylformamide                                            | 200-679-5  <br>68-12-2    | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 93  | Dibutyltin dichloride (DBTC)                                     | 211-670-0  <br>683-18-1   | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 94  | Lead monoxide (Lead oxide)                                       | 215-267-0  <br>1317-36-8  | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 95  | Orange lead (Lead tetroxide)                                     | 215-235-6  <br>1314-41-6  | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 96  | Lead bis(tetrafluoroborate)                                      | 237-486-0  <br>13814-96-5 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 97  | Trilead bis(carbonate)dihydroxide                                | 215-290-6  <br>1319-46-6  | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 98  | Lead titanium trioxide                                           | 235-038-9  <br>12060-00-3 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 99  | Lead titanium zirconium oxide                                    | 235-727-4  <br>12626-81-2 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 100 | Silicic acid, lead salt                                          | 234-363-3  <br>11120-22-2 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 101 | 1-bromopropane (n-propyl bromide)                                | 203-445-0  <br>106-94-5   | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 102 | Methyloxirane (Propylene oxide)                                  | 200-879-2  <br>75-56-9    | Carcinogenic (Article 57a);<br>Mutagenic (Article 57b)                                     |  | X |  |
| 103 | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear | 284-032-2  <br>84777-06-0 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 104 | Diisopentylphthalate (DIPP)                                      | 210-088-4  <br>605-50-5   | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 105 | N-pentyl-isopentylphthalate                                      | -   776297-69-9           | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 106 | 1,2-diethoxyethane                                               | 211-076-1  <br>629-14-1   | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 107 | Acetic acid, lead salt, basic                                    | 257-175-3  <br>51404-69-4 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 108 | Lead oxide sulfate                                               | 234-853-7  <br>12036-76-9 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
| 109 | [Phthalato(2-)]dioxotrilead                                      | 273-688-5  <br>69011-06-9 | Toxic for reproduction (Article 57 c)                                                      |  | X |  |
|     |                                                                  |                           |                                                                                            |  |   |  |

|     |                                                    |                            |                                                        |  |   |  |
|-----|----------------------------------------------------|----------------------------|--------------------------------------------------------|--|---|--|
| 110 | Dioxobis(stearato)trilead                          | 235-702-8  <br>12578-12-0  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 111 | Fatty acids, C16-18, lead salts                    | 292-966-7  <br>91031-62-8  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 112 | Lead cyanamidate                                   | 244-073-9  <br>20837-86-9  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 113 | Lead dinitrate                                     | 233-245-9  <br>10099-74-8  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 114 | Pentalead tetraoxide sulphate                      | 235-067-7  <br>12065-90-6  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 115 | Pyrochlore, antimony lead yellow                   | 232-382-1  <br>8012-00-8   | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 116 | Sulfurous acid, lead salt, dibasic                 | 263-467-1  <br>62229-08-7  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 117 | Tetraethyllead                                     | 201-075-4  <br>78-00-2     | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 118 | Tetralead trioxide sulphate                        | 235-380-9  <br>12202-17-4  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 119 | Trilead dioxide phosphonate                        | 235-252-2  <br>12141-20-7  | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 120 | Furan                                              | 203-727-3  <br>110-00-9    | Carcinogenic (Article 57a)                             |  | X |  |
| 121 | Diethyl sulphate                                   | 200-589-6  <br>64-67-5     | Carcinogenic (Article 57a);<br>Mutagenic (Article 57b) |  | X |  |
| 122 | Dimethyl sulphate                                  | 201-058-1  <br>77-78-1     | Carcinogenic (Article 57a)                             |  | X |  |
| 123 | 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 421-150-7  <br>143860-04-2 | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 124 | Dinoseb (6-sec-butyl-2,4-dinitrophenol)            | 201-861-7  <br>88-85-7     | Toxic for reproduction (Article 57 c)                  |  | X |  |
| 125 | 4,4'-methylenedi-o-toluidine                       | 212-658-8  <br>838-88-0    | Carcinogenic (Article 57a)                             |  | X |  |
| 126 | 4,4'-oxydianiline and its salts                    | 202-977-0  <br>101-80-4    | Carcinogenic (Article 57a);<br>Mutagenic (Article 57b) |  | X |  |
| 127 | 4-aminoazobenzene                                  | 200-453-6  <br>60-09-3     | Carcinogenic (Article 57a)                             |  | X |  |
| 128 | 4-methyl-m-phenylenediamine (toluene-2,4-diamine)  | 202-453-1  <br>95-80-7     | Carcinogenic (Article 57a)                             |  | X |  |
| 129 | 6-methoxy-m-toluidine (p-cresidine)                | 204-419-1  <br>120-71-8    | Carcinogenic (Article 57a)                             |  | X |  |
| 130 | Biphenyl-4-ylamine                                 | 202-177-1  <br>92-67-1     | Carcinogenic (Article 57a)                             |  | X |  |
| 131 | o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]     | 202-591-2  <br>97-56-3     | Carcinogenic (Article 57a)                             |  | X |  |
| 132 | o-toluidine                                        | 202-429-0                  | Carcinogenic (Article 57a)                             |  | X |  |

|     |                                                                                                                                                                           |                                                                                                     |                                                                                                                        |  |   |  |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--|---|--|
|     |                                                                                                                                                                           | 95-53-4                                                                                             |                                                                                                                        |  |   |  |
| 133 | N-methylacetamide                                                                                                                                                         | 201-182-6   79-16-3                                                                                 | Toxic for reproduction (Article 57 c)                                                                                  |  | X |  |
| 134 | Silicic acid (H <sub>2</sub> SiO <sub>5</sub> ), barium salt (1:1), lead-doped                                                                                            | 272-271-5   68784-75-8                                                                              | Toxic for reproduction (Article 57 c)                                                                                  |  | X |  |
| 135 | Cyclohexane-1,2-dicarboxylic anhydride [1]; cis-cyclohexane-1,2-dicarboxylic anhydride [2]; trans-cyclohexane-1,2-dicarboxylic anhydride [3]                              | 201-604-9, 236-086-3, 238-009-9   85-42-7, 13149-00-3, 14166-21-3                                   | Equivalent level of concern having probable serious effects to human health (Article 57 f)                             |  | X |  |
| 136 | Hexahydromethylphthalic anhydride [1], ; Hexahydro-4-methylphthalic anhydride [2], ; Hexahydro-1-methylphthalic anhydride [3], ; Hexahydro-3-methylphthalic anhydride [4] | 247-094-1, 243-072-0, 256-356-4, 260-566-1   25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9 & #160; | Equivalent level of concern having probable serious effects to human health (Article 57 f)                             |  | X |  |
| 137 | 4-Nonylphenol, branched and linear                                                                                                                                        | -   -                                                                                               | Equivalent level of concern having probable serious effects to the environment (Article 57 f)                          |  | X |  |
| 138 | 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated                                                                                                                           | -   -                                                                                               | Equivalent level of concern having probable serious effects to the environment (Article 57 f)                          |  | X |  |
| 139 | Cadmium                                                                                                                                                                   | 231-152-8   7440-43-9                                                                               | Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f) |  | X |  |
| 140 | Ammonium pentadecafluorooctanoate (APFO)                                                                                                                                  | 223-320-4   3825-26-1                                                                               | Toxic for reproduction (Article 57 c); PBT (Article 57 d)                                                              |  | X |  |
| 141 | Pentadecafluorooctanoic acid (PFOA)                                                                                                                                       | 206-397-9   335-67-1                                                                                | Toxic for reproduction (Article 57 c); PBT (Article 57 d)                                                              |  | X |  |
| 142 | Dipentyl phthalate (DPP)                                                                                                                                                  | 205-017-9   131-18-0                                                                                | Toxic for reproduction (Article 57 c);                                                                                 |  | X |  |
| 143 | 4-Nonylphenol, branched and linear, ethoxylated                                                                                                                           | -   -                                                                                               | Equivalent level of concern having probable serious effects to the environment (Article 57 f)                          |  | X |  |
| 144 | Cadmium oxide                                                                                                                                                             | 215-146-2   1306-19-0                                                                               | Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f) |  | X |  |
| 145 | Cadmium sulphide                                                                                                                                                          | 215-147-8   1306-23-6                                                                               | Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f) |  | X |  |
| 146 | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-                                                                                                | 209-358-4   573-58-0                                                                                | Carcinogenic (Article 57a)                                                                                             |  | X |  |

|     |                                                                                                                                                                                                                                                              |                                    |                                                                                                                                                                                                   |  |   |  |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|--|
|     | sulphonate) (C.I. Direct Red 28)                                                                                                                                                                                                                             |                                    |                                                                                                                                                                                                   |  |   |  |
| 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)                                                                                                        | 217-710-3   1937-37-7              | Carcinogenic (Article 57a)                                                                                                                                                                        |  | X |  |
| 148 | Dihexyl phthalate                                                                                                                                                                                                                                            | 201-559-5   84-75-3                | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 149 | Imidazolidine-2-thione (2-imidazoline-2-thiol)                                                                                                                                                                                                               | 202-506-9   96-45-7                | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 150 | Lead di(acetate)                                                                                                                                                                                                                                             | 206-104-4   301-04-2               | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 151 | Trixylyl phosphate                                                                                                                                                                                                                                           | 246-677-8   25155-23-1             | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 152 | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear                                                                                                                                                                                             | 271-093-5   68515-50-4             | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 153 | Sodium perborate; perboric acid, sodium salt                                                                                                                                                                                                                 | 39-172-9; 234-390-0   -            | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 154 | Sodium peroxometaborate                                                                                                                                                                                                                                      | 231-556-4   7632-04-4              | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
| 155 | Cadmium chloride                                                                                                                                                                                                                                             | 233-296-7   10108-64-2             | Carcinogenic (Article 57a);<br>Mutagenic (Article 57b);<br>Toxic for reproduction (Article 57c);<br>Equivalent level of concern having probable serious effects to human health (Article 57 f)    |  | X |  |
| 156 | Cadmium sulphate                                                                                                                                                                                                                                             | 233-331-6   10124-36-4, 31119-53-6 | Carcinogenic (Article 57 a);<br>Mutagenic (Article 57 b);<br>Toxic for reproduction (Article 57 c);<br>Equivalent level of concern having probable serious effects to human health (Article 57 f) |  | X |  |
| 157 | Cadmium fluoride                                                                                                                                                                                                                                             | 232-222-0   7790-79-6              | Carcinogenic (Article 57 a);<br>Mutagenic (Article 57 b);<br>Toxic for reproduction (Article 57 c);<br>Equivalent level of concern having probable serious effects to human health (Article 57 f) |  | X |  |
| 158 | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)                                                                                                                                                                                                     | 247-384-8   25973-55-1             | PBT (Article 57 d);<br>vPvB (Article 57 e)                                                                                                                                                        |  | X |  |
| 159 | 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) | -   -                              | Toxic for reproduction (Article 57 c)                                                                                                                                                             |  | X |  |
|     |                                                                                                                                                                                                                                                              |                                    |                                                                                                                                                                                                   |  |   |  |

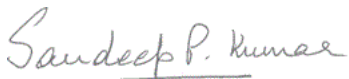
|     |                                                                                                                                                                                                                                           |                                                          |                                                                                                                                            |  |   |  |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|---|--|
| 160 | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)                                                                                                                                                    | 239-622-4   15571-58-1                                   | Toxic for reproduction (Article 57 c)                                                                                                      |  | X |  |
| 161 | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)                                                                                                                                                                                      | 223-346-6   3846-71-7                                    | PBT (Article 57 d); vPvB (Article 57 e)                                                                                                    |  | X |  |
| 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)                                                             | 271-094-0; 272-013-1   68515-51-5; 68648-93-1            | Toxic for reproduction (Article 57 c)                                                                                                      |  | X |  |
| 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] | -   -                                                    | vPvB (Article 57e)                                                                                                                         |  | X |  |
| 164 | Nitrobenzene                                                                                                                                                                                                                              | 202-716-0   98-95-3                                      | Toxic for reproduction (Article 57 c)                                                                                                      |  | X |  |
| 165 | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)                                                                                                                                                                      | 253-037-1   36437-37-3                                   | vPvB (Article 57 e)                                                                                                                        |  | X |  |
| 166 | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)                                                                                                                                                                            | 223-383-8   3864-99-1                                    | vPvB (Article 57 e)                                                                                                                        |  | X |  |
| 167 | 1,3-propanesultone                                                                                                                                                                                                                        | 214-317-9   1120-71-4                                    | Carcinogenic (Article 57 a)                                                                                                                |  | X |  |
| 168 | Perfluorononan-1-oic-acid and its sodium and ammonium salts                                                                                                                                                                               | 206-801-3   375-95-1; 21049-39-8; 4149-60-4              | Toxic for reproduction (Article 57 c) PBT (Article 57 d)                                                                                   |  | X |  |
| 169 | Benzo[def]chrysene                                                                                                                                                                                                                        | 200-028-5   50-32-8                                      | Carcinogenic (Article 57a)<br>Mutagenic (Article 57b)<br>Toxic for reproduction (Article 57c)<br>PBT (Article 57 d)<br>vPvB (Article 57 e) |  | X |  |
| 170 | p-(1,1-dimethylpropyl)phenol                                                                                                                                                                                                              | 201-280-9   80-46-6                                      | Equivalent level of concern having probable serious effects to environment (Article 57 f)                                                  |  | X |  |
| 171 | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts, Ammonium nonadecafluorodecanoate, Decanoic acid, nonadecafluoro-, sodium salt                                                                                       | 206-400-3; 221-470-5; -   335-76-2; 3108-42-7; 3830-45-3 | Toxic for reproduction (Article 57c)<br>PBT (Article 57 d)                                                                                 |  | X |  |
| 172 | 4-Heptylphenol, branched and linear                                                                                                                                                                                                       | -   -                                                    | Equivalent level of concern having probable serious effects to environment (Article 57 f)                                                  |  | X |  |
| 173 | 4,4'-isopropylidenediphenol                                                                                                                                                                                                               | 201-245-8   80-05-7                                      | Toxic for reproduction (Article 57c)<br>Endocrine disrupting properties (Article 57(f) - environment)                                      |  | X |  |
| 174 | Perfluorohexane-1-sulphonic acid and its salts                                                                                                                                                                                            | -   -                                                    | vPvB (Article 57e)                                                                                                                         |  | X |  |
|     |                                                                                                                                                                                                                                           |                                                          |                                                                                                                                            |  |   |  |

|     |                                                                                                                       |                                          |                                                                                                                                                |  |   |  |
|-----|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--|---|--|
| 175 | Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) | -   -                                    | Endocrine disrupting properties (Article 57(f) - environment)                                                                                  |  | X |  |
| 176 | Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™)                               | -   -                                    | vPvB (Article 57e)                                                                                                                             |  | X |  |
| 177 | Chrysene                                                                                                              | 205-923-4  <br>218-01-9,<br>1719-03-5    | Carcinogenic (Article 57a)<br>PBT (Article 57d)<br>vPvB (Article 57e)                                                                          |  | X |  |
| 178 | Cadmium nitrate                                                                                                       | 233-710-6  <br>10022-68-1,<br>10325-94-7 | Carcinogenic (Article 57a)<br>Mutagenic (Article 57b)<br>Specific target organ toxicity after repeated exposure (Article 57(f) - human health) |  | X |  |
| 179 | Cadmium hydroxide                                                                                                     | 244-168-5  <br>21041-95-2                | Carcinogenic (Article 57a)<br>Mutagenic (Article 57b)<br>Specific target organ toxicity after repeated exposure (Article 57(f) - human health) |  | X |  |
| 180 | Cadmium carbonate                                                                                                     | 208-168-9  <br>513-78-0                  | Carcinogenic (Article 57a)<br>Mutagenic (Article 57b)<br>Specific target organ toxicity after repeated exposure (Article 57(f) - human health) |  | X |  |
| 181 | Benz[a]anthracene                                                                                                     | 200-280-6  <br>56-55-3, 1718-53-2        | Carcinogenic (Article 57a)<br>PBT (Article 57d)<br>vPvB (Article 57e)                                                                          |  | X |  |
| 182 | Terphenyl, hydrogenated                                                                                               | 262-967-7  <br>61788-32-7                | vPvB (Article 57e)                                                                                                                             |  | X |  |
| 183 | Octamethylcyclotetrasiloxane D4                                                                                       | 209-136-7  <br>556-67-2                  | PBT (Article 57d)<br>vPvB (Article 57e)                                                                                                        |  | X |  |
| 184 | Lead                                                                                                                  | 231-100-4  <br>7439-92-1                 | Toxic for reproduction (Article 57c)                                                                                                           |  | X |  |
| 185 | Ethylenediamine EDA                                                                                                   | 203-468-6  <br>107-15-3                  | Respiratory sensitising properties (Article 57(f) - human health)                                                                              |  | X |  |
| 186 | Dodecamethylcyclohexasiloxane D6                                                                                      | 208-762-8  <br>540-97-6                  | PBT (Article 57d)<br>vPvB (Article 57e)                                                                                                        |  | X |  |
| 187 | Disodium octaborate                                                                                                   | 234-541-0  <br>12008-41-2                | Toxic for reproduction (Article 57c)                                                                                                           |  | X |  |
| 188 | Dicyclohexyl phthalate DCHP                                                                                           | 201-545-9  <br>84-61-7                   | Toxic for reproduction (Article 57c); Endocrine disrupting properties (Article 57(f) - human health)                                           |  | X |  |
| 189 | Decamethylcyclopentasiloxane D5                                                                                       | 208-764-9  <br>541-02-6                  | PBT (Article 57d)<br>vPvB (Article 57e)                                                                                                        |  | X |  |
| 190 | Benzo[ghi]perylene                                                                                                    | 205-883-8  <br>191-24-2                  | PBT (Article 57d)<br>vPvB (Article 57e)                                                                                                        |  | X |  |
| 191 | Benzene-1,2,4-tricarboxylic acid 1,2 anhydride,                                                                       | 209-008-0                                | Respiratory sensitising                                                                                                                        |  | X |  |

|     |                                                               |                        |                                                                       |  |   |  |
|-----|---------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|--|---|--|
|     | trimellitic anhydride; TMA                                    | 552-30-7               | properties (Article 57(f) - human health)                             |  |   |  |
| 192 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane                     | 401-720-1   6807-17-6  | Toxic for reproduction (Article 57c)                                  |  | X |  |
| 193 | Benzo[k]fluoranthene                                          | 205-916-6   207-08-9   | Carcinogenic (Article 57a)<br>PBT (Article 57d)<br>vPvB (Article 57e) |  | X |  |
| 194 | Fluoranthene                                                  | 205-912-4   206-44-0   | PBT (Article 57d)<br>vPvB (Article 57e)                               |  | X |  |
| 195 | Phenanthrene                                                  | 201-581-5   85-01-8    | vPvB (Article 57e)                                                    |  | X |  |
| 196 | Pyrene                                                        | 204-927-3   129-00-0   | PBT (Article 57d)<br>vPvB (Article 57e)                               |  | X |  |
| 197 | 1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one | 239-139-9   15087-24-8 | Endocrine disrupting properties (Article 57(f) - environment)         |  | X |  |

In addition to the substances listed above, all Silicon Labs' parts meet Annex XIV of REACH and Annex XVII of REACH Directive 76 / 769 / EEC.

For additional inquiries, please visit our [Environmental Responsibility](#) page or [contact](#) your local Silicon Labs sales representative.



Sandeep P. Kumar

Senior Vice President of Worldwide Operations

400 W. Cesar Chavez St.

Austin, Texas 78701

Phone (512) 416-8500

Fax (512) 416-9669

[www.silabs.com](http://www.silabs.com)