

Declaration of REACH Substances of Very High Concern(SVHCs)

Statement issue date : Sep. 17, 2019

Product Covered : All products manufactured by BeRex Corporation unless the product is specially stated otherwise.

Dear Customers :

The European Regulation EC 1907/2008 on the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) entered into force on 16th July 2019. Article 33 of REACH requires suppliers to inform recipients and respond to customer enquiries if an article contains more than 0.1%(by weight per article) of any substance on the candidate list of Substances of Very High Concern (SVHC).

BeRex Co., Ltd. (The "BeRex") hereby declares a concentration of substances on the SVHC candidate list which are contained in a quantity of more than 0.1%(w/w) in each components of a product and/or its packaging placed on the European Community market by the BeRex and its subsidiaries.

Appendix

201 Substances of Very High Concern (SVHC) in the Candidate List – issued on Jul. 16, 2019

| No. | Substance Name | CAS Number |
|-----|--|--|
| 1 | Cobalt dichloride | 7646-79-9 |
| 2 | Diarsenic pentaoxide | 1303-28-2 |
| 3 | Diarsenic trioxide | 1327-53-3 |
| 4 | Lead hydrogen arsenate | 7784-40-9 |
| 5 | Triethyl arsenate | 15606-95-8 |
| 6 | Sodium dichromate, dihydrate | 7789-12-0 |
| 7 | Bis (tributyltin)oxide (TBTO) | 56-35-9 |
| 8 | Anthracene | 120-12-7 |
| 9 | 4,4'-Diaminodiphenylmethane (MDA) | 101-77-9 |
| 10 | Dibutyl phthalate (DBP) | 84-74-2 |
| 11 | 5- <i>tert</i> -Butyl-2,4,6-trinitro- <i>m</i> -xylene (musk xylene) | 81-15-2 |
| 12 | Bis(2-ethylhexyl) phthalate (DEHP) | 117-81-7 |
| 13 | Hexabromocyclododecane (HBCDD) | 25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8 |
| 14 | Benzyl butyl phthalate (BBP) | 85-68-7 |
| 15 | Short chain chlorinated parafins (C10-13) | 85535-84-8 |
| 16 | Anthracene oil | 90640-80-5 |
| 17 | Anthracene oil, anthracene paste, distn. lights | 91995-17-4 |
| 18 | Anthracene oil, anthracene paste, anthracene fraction | 91995-15-2 |
| 19 | Anthracene oil, anthracene-low | 90640-82-7 |
| 20 | Anthracene oil, anthracene paste | 90640-81-6 |
| 21 | Coal tar pitch, high temp. | 65996-93-2 |
| 22 | Acrylamide | 79-06-1 |
| 23 | 2,4-Dinitrotoluene | 121-14-2 |
| 24 | Diisobutyl phthalate (DIBP) | 84-69-5 |
| 25 | Lead chromate | 7758-97-6 |
| 26 | Lead chromate molybdate sulphate red (C.I. Pigment red 104) | 12656-85-8 |
| 27 | Lead sulfochromate yellow (C.I. Pigment yellow 34) | 1344-37-2 |
| 28 | Tris(2-chloroethyl) phosphate (TCEP) | 115-96-8 |
| 29 | Trichloroethylene | 79-01-6 |
| 30 | Boric acid | 10043-35-3 11113-50-1 |
| 31 | Disodium tetraborate, anhydrous | 1330-43-4 12179-04-3 1303-96-4 |
| 32 | Tetraboron disodium heptaoxide, hydrate | 12267-73-1 |
| 33 | Sodium chromate | 7775-11-3 |
| 34 | Potassium chromate | 7789-00-6 |
| 35 | Ammonium dichromate | 7789-09-5 |
| 36 | Potassium dichromate | 7778-50-9 |
| 37 | Cobalt(II) sulphate | 10124-43-3 |
| 38 | Cobalt(II) dinitrate | 10141-05-6 |
| 39 | Cobalt(II) carbonate | 513-79-1 |
| 40 | Cobalt(II) diacetate | 71-48-7 |
| 41 | 2-Methoxyethanol | 109-86-4 |
| 42 | 2-Ethoxyethanol | 110-80-5 |

| | | |
|----|--|-------------------------|
| 43 | Chromium trioxide | 1333-82-0 |
| 44 | Acids generated from chromium trioxide and their oligomers: Chromic acid Dichromic acid Oligomers of chromic acid and dichromic acid | 7738-94-5 13530-68-2 |
| 45 | 2-Ethoxyethyl acetate (2-EEA) | 111-15-9 |
| 46 | Strontium chromate | 7789-06-2 |
| 47 | 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) | 68515-42-4 |
| 48 | Hydrazine | 7803-57-8 302-01-2 |
| 49 | 1-Methyl-2-pyrrolidone (NMP) | 872-50-4 |
| 50 | 1,2,3-Trichloropropane | 96-18-4 |
| 51 | 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) | 71888-89-6 |
| 52 | Dichromium tris(chromate) | 24613-89-6 |
| 53 | Potassium hydroxyoctaoxidizincatedi-chromate | 11103-86-9 |
| 54 | Pentazinc chromate octahydroxide | 49663-84-5 |
| 55 | Formaldehyde, oligomeric reaction products with aniline (technical MDA) | 25214-70-4 |
| 56 | Aluminosilicate refractory ceramic fibres (RCF) ** | -- |
| 57 | Zirconia aluminosilicate refractory ceramic fibres (Zr- RCF) ** | -- |
| 58 | Bis(2-methoxyethyl)phthalate(DMEP) | 117-82-8 |
| 59 | 2-Methoxyaniline(o-Anisidine) | 90-04-0 |
| 60 | 4-(1,1,3,3-Tetramethylbutyl)phenol, (4-tert-Octylphenol) | 140-66-9 |
| 61 | 1,2-Dichloroethane | 107-06-2 |
| 62 | Bis(2-methoxyethyl) ether | 111-96-6 |
| 63 | Arsenic acid | 7778-39-4 |
| 64 | Calcium arsenate | 7778-44-1 |
| 65 | Trilead diarsenate | 3687-31-8 |
| 66 | N,N-Dimethylacetamide (DMAC) | 127-19-5 |
| 67 | 4,4'-Methylenebis(2-chloroaniline) (MOCA) | 101-14-4 |
| 68 | Phenolphthalein | 77-09-8 |
| 69 | Lead azide (Lead diazide) | 13424-46-9 |
| 70 | Lead styphnate | 15245-44-0 |
| 71 | Lead dipicrate | 6477-64-1 |
| 72 | 1,2-Bis(2-methoxyethoxy)ethane (TEGDME; Triglyme) | 112-49-2 |
| 73 | 1,2-Dimethoxyethane; Ethylene glycol dimethyl ether (EGDME) | 110-71-4 |
| 74 | Diboron trioxide | 1303-86-2 |
| 75 | Formamide | 75-12-7 |
| 76 | Lead(II) bis(methanesulfonate) | 17570-76-2 |
| 77 | 1,3,5-Tris(oxiranylmethyl)-1,3,5-triazine- 2,4,6-(1H,3H,5H)-trione (TGIC) | 2451-62-9 |
| 78 | 1,3,5-Tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) | 59653-74-6 |
| 79 | 4,4'-Bis(dimethylamino)benzophenone (Michler's ketone) | 90-94-8 |
| 80 | N,N,N',N'-Tetramethyl-4,4'-methylenedianiline (Michler's base) | 101-61-1 |
| 81 | {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)] | 2580-56-5 |
| 82 | {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)] | 548-62-9 |
| 83 | 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)] | 561-41-1 |
| 84 | 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)] | 6786-83-0 |
| 85 | Bis(pentabromophenyl) ether (DecaBDE) | 1163-19-5 |
| 86 | Pentacosafuorotridecanoic acid | 72629-94-8 |
| 87 | Tricosafuorododecanoic acid | 307-55-1 |

| | | |
|-----|--|---|
| 88 | Henicosfluoroundecanoic acid | 2058-94-8 |
| 89 | Heptacosfluorotetradecanoic acid | 376-06-7 |
| 90 | 4-(1,1,3,3-Tetramethylbutyl)phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues | -- |
| 91 | 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 | -- |
| 92 | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) | 123-77-3 |
| 93 | Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA) | 85-42-7, 13149-00-3, 14166-21-3 |
| 94 | Hexahydromethylphthalic anhydride (MHHPA-1) Hexahydro-4-methylphthalic anhydride (MHHPA-2) Hexahydro-1-methylphthalic anhydride (MHHPA-3) Hexahydro-3-methylphthalic anhydride (MHHPA-4) | 25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9 |
| 95 | Methoxy acetic acid | 625-45-6 |
| 96 | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (PIPP) | 84777-06-0 |
| 97 | Diisopentyl phthalate (DIPP) | 605-50-5 |
| 98 | <i>n</i> -Pentyl- <i>iso</i> -pentyl phthalate (PIPP) | 776297-69-9 |
| 99 | 1,2-Diethoxyethane | 629-14-1 |
| 100 | N,N-Dimethylformamide; Dimethyl formamide (DMFA) | 200-679-5 |
| 101 | Dibutyltin dichloride (DBT) | 211-670-0 |
| 102 | Acetic acid, lead salt, basic | 257-175-3 |
| 103 | Basic lead carbonate (Trilead bis(carbonate) dihydroxide) | 215-290-6 |
| 104 | Lead oxide sulfate (Basic lead sulfate) | 234-853-7 |
| 105 | [Phthalato(2-)]dioxotrilead (Dibasic lead phthalate) | 273-688-5 |
| 106 | Dioxobis(stearato)trilead | 235-702-8 |
| 107 | Fatty acids, C16-18, lead salts | 292-966-7 |
| 108 | Lead bis(tetrafluoroborate) | 237-486-0 |
| 109 | Lead cyanamate | 244-073-9 |
| 110 | Lead dinitrate | 10099-74-8 |
| 111 | Lead oxide (Lead monoxide) | 1317-36-8 |
| 112 | Lead tetroxide (Orange lead) | 1314-41-6 |
| 113 | Lead titanium trioxide | 12060-00-3 |
| 114 | Lead titanium zirconium oxide | 12626-81-2 |
| 115 | Pentalead tetraoxide sulphate | 12065-90-6 |
| 116 | Pyrochlore, antimony lead yellow | 8012-00-8 |
| 117 | Silicic acid, barium salt, lead-doped | 68784-75-8 |
| 118 | Silicic acid, lead salt | 11120-22-2 |
| 119 | Sulfurous acid, lead salt, dibasic | 62229-08-7 |
| 120 | Tetraethyllead | 78-00-2 |
| 121 | Tetralead trioxide sulphate | 12202-17-4 |
| 122 | Trilead dioxide phosphonate | 12141-20-7 |
| 123 | Furan | 110-00-9 |
| 124 | Propylene oxide; 1,2-Epoxypropane; Methyloxirane | 75-56-9 |
| 125 | Diethyl sulphate | 64-67-5 |
| 126 | Dimethyl sulphate | 77-78-1 |
| 127 | 3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 143860-04-2 |
| 128 | Dinoseb | 88-85-7 |
| 129 | 4,4'-Methylenedi- <i>o</i> -toluidine | 838-88-0 |
| 130 | 4,4'-Oxydianiline and its salts | 101-80-4 |
| 131 | 4-Aminoazobenzene; 4-Phenylazoaniline | 60-09-3 |
| 132 | 4-Methyl- <i>m</i> -phenylenediamine (2,4-Toluene-diamine) | 95-80-7 |
| 133 | 6-Methoxy- <i>m</i> -toluidine (<i>p</i> -cresidine) | 120-71-8 |

| | | |
|-----|--|-------------------------------------|
| 134 | Biphenyl-4-ylamine ; 4-Aminobiphenyl | 92-67-1 |
| 135 | <i>o</i> -Aminoazotoluene | 97-56-3 |
| 136 | <i>o</i> -Toluidine; 2-Aminotoluene | 95-53-4 |
| 137 | N-Methylacetamide | 79-16-3 |
| 138 | 1-Bromopropane; <i>n</i> -Propyl bromide | 106-94-5 |
| 139 | Cadmium | 7440-43-9 |
| 140 | Cadmium oxide | 1306-19-0 |
| 141 | Pentadecafluorooctanoic acid (PFOA) | 335-67-1 |
| 142 | Ammonium pentadecafluorooctanoate (APFO) | 3825-26-1 |
| 143 | 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] | -- |
| 144 | Dipentyl phthalate (DPP) | 131-18-0 |
| 145 | Cadmium sulphide | 1306-23-6 |
| 146 | Lead di(acetate) | 301-04-2 |
| 147 | Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'- biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38) | 1937-37-7 |
| 148 | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4- aminonaphthalene-1-sulphonate) (C.I. Direct Red 28) | 573-58-0 |
| 149 | Trixylyl phosphate | 25155-23-1 |
| 150 | Dihexyl phthalate (DnHP) | 84-75-3 |
| 151 | Imidazolidine-2-thione; 2-Imidazoline-2-thiol | 96-45-7 |
| 152 | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear | 68515-50-4 |
| 153 | Cadmium chloride | 10108-64-2 |
| 154 | Sodium perborate; Perboric acid, sodium salt | -- |
| 155 | Sodium peroxometaborate | 7632-04-4 |
| 156 | 2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) | 25973-55-1 |
| 157 | 2-Benzotriazol-2-yl-4,6-di- <i>tert</i> -butylphenol (UV-320) | 3846-71-7 |
| 158 | 2-Ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia- 4-stannatetradecanoate (DOTE) | 15571-58-1 |
| 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) | -- |
| 160 | Cadmium fluoride | 232-222-0 |
| 161 | Cadmium sulphate | 233-331-6 |
| 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 | 271-094-0 272-013-1 |
| 163 | 5- <i>sec</i> -Butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5- methyl-1,3-dioxane [1], 5- <i>sec</i> -Butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof] | -- |
| 164 | Nitrobenzene | 202-716-0 |
| 165 | 2,4-Di- <i>tert</i> -butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) | 3864-99-1 |
| 166 | 2-(2H-Benzotriazol-2-yl)-4-(<i>tert</i> -butyl)-6-(<i>sec</i> - butyl)phenol (UV-350) | 36437-37-3 |
| 167 | 1,3-Propanesultone | 1120-71-4 |
| 168 | Perfluorononan-1-oic-acid and its sodium and ammonium salts | 375-95-1 21049-39-8 4149-60-4 |
| 169 | Benzo[def]chrysene (Benzo[a]pyrene) | 50-32-8 |
| 170 | 4,4'-isopropylidenediphenol (bisphenol A; BPA) | 80-05-7 |
| 171 | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts | 335-76-2 3830-45-3 3108-42-7 |
| 172 | 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] | -- |
| 173 | <i>p</i> -(1,1-Dimethylpropyl)phenol | 80-46-6 |
| 174 | Perfluorohexane-1-sulphonic acid and its salts (PFHxS) | -- |

| | | |
|-----|---|------------|
| 175 | Benz[a]anthracene | 56-55-3 |
| 176 | Cadmium nitrate | 10325-94-7 |
| 177 | Cadmium hydroxide | 21041-95-2 |
| 178 | Cadmium carbonate | 513-78-0 |
| 179 | Chrysene | 218-01-9 |
| 180 | Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octade ca-7,15-diene ("Dechlorane Plus™") covering any of its individual anti- and syn-isomers or any combination thereof | -- |
| 181 | Reaction products of 1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear] | -- |
| 182 | Octamethylcyclotetrasiloxane (D4) | 556-67-2 |
| 183 | Decamethylcyclopentasiloxane (D5) | 541-02-6 |
| 184 | Dodecamethylcyclohexasiloxane (D6) | 540-97-6 |
| 185 | Lead | 7439-92-1 |
| 186 | Disodium octaborate | 12008-41-2 |
| 187 | Benzo[g,h,i]perylene | 191-24-2 |
| 188 | Terphenyl hydrogenated | 61788-32-7 |
| 189 | Ethylenediamine (EDA) | 107-15-3 |
| 190 | Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (trimellitic anhydride; TMA) | 552-30-7 |
| 191 | Dicyclohexyl phthalate (DCHP) | 84-61-7 |
| 192 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane | 6807-17-6 |
| 193 | Benzo[k]fluoranthene | 207-08-9 |
| 194 | Fluoranthene | 206-44-0 |
| 195 | Phenanthrene | 85-01-8 |
| 196 | Pyrene | 129-00-0 |
| 197 | 1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one | 15087-24-8 |
| 198 | 2,3,3,3-tetrafluoro-2(heptafluoropropoxy) propionic acid, it salts and its acyl halides covering any of their individual isomers and combinations thereof | |
| 199 | 2-methoxyethyl acetate | 110-49-6 |
| 200 | 4-tert-butylphenol | 98-54-4 |
| 201 | Tris(4-nonylphenyl, branched and linear) phosphite(TNPP) with ≥0.1% w/w of 4-nonylphenol, branched and linear (4-NP) | - |