

Candidate List of substances of very high concern for Authorisation (published in accordance with Article 59(10) of the REACH Regulation) - July 2017

| Name | CAS no. | Date of inclusion | Present Yes/No |
|--|------------------------|-------------------|----------------|
| Perfluorohexane-1-sulphonic acid and its salts | - | 07/07/2017 | No |
| 4,4'-isopropylidenediphenol | 80-05-7 | 12/01/2017 | No |
| 4-heptylphenol, branched and linear | - | 12/01/2017 | No |
| Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts | - | 12/01/2017 | No |
| Nonadecafluorodecanoic acid | 335-76-2 | 12/01/2017 | No |
| Decanoic acid, nonadecafluoro-, sodium salt | 3830-45-3 | 12/01/2017 | No |
| Ammonium nonadecafluorodecanoate | 3108-42-7 | 12/01/2017 | No |
| p-(1,1-dimethylpropyl)phenol | 80-46-6 | 12/01/2017 | No |
| Benzo[def]chrysene (Benzo[a]pyrene) | 50-32-8 | 20/06/2016 | No |
| 1,3-propanesultone | 1120-71-4 | 17/12/2015 | No |
| 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) | 3864-99-1 | 17/12/2015 | No |
| 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) | 36437-37-3 | 17/12/2015 | No |
| Nitrobenzene | 98-95-3 | 17/12/2015 | No |
| Perfluorononan-1-oic-acid and its sodium and ammonium salts | - | 17/12/2015 | No |
| Ammonium salts of perfluorononan-1-oic-acid | -, 4149-60-4 | 17/12/2015 | No |
| Perfluorononan-1-oic-acid | 375-95-1 | 17/12/2015 | No |
| Sodium salts of perfluorononan-1-oic-acid | -, 21049-39-8 | 17/12/2015 | No |
| 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters | - | 15/06/2015 | No |
| 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters | 68648-93-1 | 15/06/2015 | No |
| 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters | 68515-51-5 | 15/06/2015 | No |
| 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] | - | 15/06/2015 | No |
| 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane | - | 15/06/2015 | No |
| 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane | - | 15/06/2015 | No |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) | 25973-55-1 | 17/12/2014 | No |
| 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) | 3846-71-7 | 17/12/2014 | No |
| 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) | 15571-58-1 | 17/12/2014 | No |
| Cadmium fluoride | 7790-79-6 | 17/12/2014 | No |
| Cadmium sulphate | 10124-36-4, 31119-53-6 | 17/12/2014 | No |
| 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) | - | 17/12/2014 | No |
| 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear | 68515-50-4 | 16/06/2014 | No |
| Cadmium chloride | 10108-64-2 | 16/06/2014 | No |
| Sodium perborate, perboric acid, sodium salt | - | 16/06/2014 | No |
| Perboric acid, sodium salt | 11138-47-9 | 16/06/2014 | No |
| Sodium perborate | 15120-21-5 | 16/06/2014 | No |

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| Sodium peroxometaborate | 7632-04-4 | 16/06/2014 | No |
| Cadmium sulphide | 1306-23-6 | 16/12/2013 | No |
| Diethyl phthalate | 84-75-3 | 16/12/2013 | No |
| Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28) | 573-58-0 | 16/12/2013 | No |
| 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 | 16/12/2013 | No |
| Imidazolidine-2-thione (2-imidazoline-2-thiol) | 96-45-7 | 16/12/2013 | No |
| Lead di(acetate) | 301-04-2 | 16/12/2013 | No |
| Triethyl phosphate | 25155-23-1 | 16/12/2013 | No |
| 4-Nonylphenol, branched and linear, ethoxylated | - | 20/06/2013 | No |
| Ammonium pentadecafluorooctanoate (APFO) | 3825-26-1 | 20/06/2013 | No |
| Cadmium | 7440-43-9 | 20/06/2013 | No |
| Cadmium oxide | 1306-19-0 | 20/06/2013 | No |
| Dipentyl phthalate (DPP) | 131-18-0 | 20/06/2013 | No |
| Pentadecafluorooctanoic acid (PFOA) | 335-67-1 | 20/06/2013 | No |
| 1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear | 84777-06-0 | 19/12/2012 | No |
| 1,2-diethoxyethane | 629-14-1 | 19/12/2012 | No |
| 1-bromopropane (n-propyl bromide) | 106-94-5 | 19/12/2012 | No |
| 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 143860-04-2 | 19/12/2012 | No |
| 4,4'-methylenedi-o-toluidine | 838-88-0 | 19/12/2012 | No |
| 4,4'-oxydianiline and its salts | - | 19/12/2012 | No |
| 4,4'-oxydianiline | 101-80-4 | 19/12/2012 | No |
| 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated | - | 19/12/2012 | No |
| 4-aminoazobenzene | 60-09-3 | 19/12/2012 | No |
| 4-methyl-m-phenylenediamine (toluene-2,4-diamine) | 95-80-7 | 19/12/2012 | No |
| 4-Nonylphenol, branched and linear | - | 19/12/2012 | No |
| 6-methoxy-m-toluidine (p-cresidine) | 120-71-8 | 19/12/2012 | No |
| [Phthalato(2-)]dioxotrilead | 69011-06-9 | 19/12/2012 | No |
| Acetic acid, lead salt, basic | 51404-69-4 | 19/12/2012 | No |
| Biphenyl-4-ylamine | 92-67-1 | 19/12/2012 | No |
| Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE) | 1163-19-5 | 19/12/2012 | No |
| Cyclohexane-1,2-dicarboxylic anhydride | - | 19/12/2012 | No |
| trans-cyclohexane-1,2-dicarboxylic anhydride | 14166-21-3 | 19/12/2012 | No |
| cis-cyclohexane-1,2-dicarboxylic anhydride | 13149-00-3 | 19/12/2012 | No |
| Cyclohexane-1,2-dicarboxylic anhydride | 85-42-7 | 19/12/2012 | No |
| Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA) | 123-77-3 | 19/12/2012 | Yes |
| Dibutyltin dichloride (DBTC) | 683-18-1 | 19/12/2012 | No |
| Diethyl sulphate | 64-67-5 | 19/12/2012 | No |
| Diisopentyl phthalate | 605-50-5 | 19/12/2012 | No |
| Dimethyl sulphate | 77-78-1 | 19/12/2012 | No |
| Dinoseb (6-sec-butyl-2,4-dinitrophenol) | 88-85-7 | 19/12/2012 | No |

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| Dioxobis(stearato)trilead | 12578-12-0 | 19/12/2012 | No |
| Fatty acids, C16-18, lead salts | 91031-62-8 | 19/12/2012 | No |
| Furan | 110-00-9 | 19/12/2012 | No |
| Henicosafuoroundecanoic acid | 2058-94-8 | 19/12/2012 | No |
| Heptacosafuorotetradecanoic acid | 376-06-7 | 19/12/2012 | No |
| Hexahydromethylphthalic anhydride | - | 19/12/2012 | No |
| Hexahydro-4-methylphthalic anhydride | 19438-60-9 | 19/12/2012 | No |
| Hexahydro-3-methylphthalic anhydride | 57110-29-9 | 19/12/2012 | No |
| Hexahydro-1-methylphthalic anhydride | 48122-14-1 | 19/12/2012 | No |
| Hexahydromethylphthalic anhydride | 25550-51-0 | 19/12/2012 | No |
| Lead bis(tetrafluoroborate) | 13814-96-5 | 19/12/2012 | No |
| Lead cyanamidate | 20837-86-9 | 19/12/2012 | No |
| Lead dinitrate | 10099-74-8 | 19/12/2012 | No |
| Lead monoxide (lead oxide) | 1317-36-8 | 19/12/2012 | No |
| Lead oxide sulfate | 12036-76-9 | 19/12/2012 | No |
| Lead titanium trioxide | 12060-00-3 | 19/12/2012 | No |
| Lead titanium zirconium oxide | 12626-81-2 | 19/12/2012 | No |
| Methoxyacetic acid | 625-45-6 | 19/12/2012 | No |
| Methyloxirane (Propylene oxide) | 75-56-9 | 19/12/2012 | No |
| N,N-dimethylformamide | 68-12-2 | 19/12/2012 | No |
| N-methylacetamide | 79-16-3 | 19/12/2012 | No |
| N-pentyl-isopentylphthalate | 776297-69-9 | 19/12/2012 | No |
| o-aminoazotoluene | 97-56-3 | 19/12/2012 | No |
| o-toluidine | 95-53-4 | 19/12/2012 | No |
| Orange lead (lead tetroxide) | 1314-41-6 | 19/12/2012 | No |
| Pentacosafuorotridecanoic acid | 72629-94-8 | 19/12/2012 | No |
| Pentalead tetraoxide sulphate | 12065-90-6 | 19/12/2012 | No |
| Pyrochlore, antimony lead yellow | 8012-00-8 | 19/12/2012 | No |
| Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped | 68784-75-8 | 19/12/2012 | No |
| Silicic acid, lead salt | 11120-22-2 | 19/12/2012 | No |
| Sulfurous acid, lead salt, dibasic | 62229-08-7 | 19/12/2012 | No |
| Tetraethyllead | 78-00-2 | 19/12/2012 | No |
| Tetralead trioxide sulphate | 12202-17-4 | 19/12/2012 | No |
| Tricosafuorododecanoic acid | 307-55-1 | 19/12/2012 | No |
| Trilead bis(carbonate) dihydroxide | 1319-46-6 | 19/12/2012 | No |
| Trilead dioxide phosphonate | 12141-20-7 | 19/12/2012 | No |
| 1,2-bis(2-methoxyethoxy)ethane (TEGDME,triglyme) | 112-49-2 | 18/06/2012 | No |
| 1,2-dimethoxyethane,ethylene glycol dimethyl ether (EGDME) | 110-71-4 | 18/06/2012 | No |
| 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) | 2451-62-9 | 18/06/2012 | No |
| 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 | 18/06/2012 | No |
| 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol | 561-41-1 | 18/06/2012 | No |

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| 4,4'-bis(dimethylamino)benzophenone (Michler's ketone) | 90-94-8 | 18/06/2012 | No |
| [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) | 548-62-9 | 18/06/2012 | No |
| [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) | 2580-56-5 | 18/06/2012 | No |
| Diboron trioxide | 1303-86-2 | 18/06/2012 | No |
| Formamide | 75-12-7 | 18/06/2012 | No |
| Lead(II) bis(methanesulfonate) | 17570-76-2 | 18/06/2012 | No |
| N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) | 101-61-1 | 18/06/2012 | No |
| α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) | 6786-83-0 | 18/06/2012 | No |
| 1,2-dichloroethane | 107-06-2 | 19/12/2011 | No |
| 2,2'-dichloro-4,4'-methylenedianiline | 101-14-4 | 19/12/2011 | No |
| 2-Methoxyaniline, o-Anisidine | 90-04-0 | 19/12/2011 | No |
| 4-(1,1,3,3-tetramethylbutyl)phenol | 140-66-9 | 19/12/2011 | No |
| Aluminosilicate Refractory Ceramic Fibres | - | 19/12/2011 | No |
| Arsenic acid | 7778-39-4 | 19/12/2011 | No |
| Bis(2-methoxyethyl) ether | 111-96-6 | 19/12/2011 | No |
| Bis(2-methoxyethyl) phthalate | 117-82-8 | 19/12/2011 | No |
| Calcium arsenate | 7778-44-1 | 19/12/2011 | No |
| Dichromium tris(chromate) | 24613-89-6 | 19/12/2011 | No |
| Formaldehyde, oligomeric reaction products with aniline | 25214-70-4 | 19/12/2011 | No |
| Lead diazide, Lead azide | 13424-46-9 | 19/12/2011 | No |
| Lead dipicrate | 6477-64-1 | 19/12/2011 | No |
| Lead styphnate | 15245-44-0 | 19/12/2011 | No |
| N,N-dimethylacetamide | 127-19-5 | 19/12/2011 | No |
| Pentazinc chromate octahydroxide | 49663-84-5 | 19/12/2011 | No |
| Phenolphthalein | 77-09-8 | 19/12/2011 | No |
| Potassium hydroxyoctaoxidizincatedichromate | 11103-86-9 | 19/12/2011 | No |
| Trilead diarsenate | 3687-31-8 | 19/12/2011 | No |
| Zirconia Aluminosilicate Refractory Ceramic Fibres | - | 19/12/2011 | No |
| 1,2,3-trichloropropane | 96-18-4 | 20/06/2011 | No |
| 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich | 71888-89-6 | 20/06/2011 | No |
| 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters | 68515-42-4 | 20/06/2011 | No |
| 1-Methyl-2-pyrrolidone (NMP) | 872-50-4 | 20/06/2011 | No |
| 2-ethoxyethyl acetate | 111-15-9 | 20/06/2011 | No |
| Hydrazine | 302-01-2, 7803-57-8 | 20/06/2011 | No |
| Strontium chromate | 7789-06-2 | 20/06/2011 | No |
| 2-ethoxyethanol | 110-80-5 | 15/12/2010 | No |
| 2-methoxyethanol | 109-86-4 | 15/12/2010 | No |
| Acids generated from chromium trioxide and their oligomers | - | 15/12/2010 | No |
| Oligomers of chromic acid and dichromic acid | - | 15/12/2010 | No |
| Chromic acid | 13530-68-2 | 15/12/2010 | No |

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|---|----------------------------------|--------------------------|-----------------------|
| Dichromic acid | 7738-94-5 | 15/12/2010 | No |
| Chromium trioxide | 1333-82-0 | 15/12/2010 | No |
| Cobalt(II) carbonate | 513-79-1 | 15/12/2010 | No |
| Cobalt(II) diacetate | 71-48-7 | 15/12/2010 | No |
| Cobalt(II) dinitrate | 10141-05-6 | 15/12/2010 | No |
| Cobalt(II) sulphate | 10124-43-3 | 15/12/2010 | No |
| Ammonium dichromate | 7789-09-5 | 18/06/2010 | No |
| Boric acid | - | 18/06/2010 | No |
| Boric acid, crude natural | 11113-50-1 | 18/06/2010 | No |
| Boric acid | 10043-35-3 | 18/06/2010 | No |
| Disodium tetraborate, anhydrous | 12179-04-3, 1303-96-4, 1330-43-4 | 18/06/2010 | No |
| Potassium chromate | 7789-00-6 | 18/06/2010 | No |
| Potassium dichromate | 7778-50-9 | 18/06/2010 | No |
| Sodium chromate | 7775-11-3 | 18/06/2010 | No |
| Tetraboron disodium heptaoxide, hydrate | 12267-73-1 | 18/06/2010 | No |
| Trichloroethylene | 79-01-6 | 18/06/2010 | No |
| Acrylamide | 79-06-1 | 30/03/2010 | No |
| 2,4-dinitrotoluene | 121-14-2 | 13/01/2010 | No |
| Anthracene oil | 90640-80-5 | 13/01/2010 | No |
| Anthracene oil, anthracene paste | 90640-81-6 | 13/01/2010 | No |
| Anthracene oil, anthracene paste, anthracene fraction | 91995-15-2 | 13/01/2010 | No |
| Anthracene oil, anthracene paste, distn. lights | 91995-17-4 | 13/01/2010 | No |
| Anthracene oil, anthracene-low | 90640-82-7 | 13/01/2010 | No |
| Diisobutyl phthalate | 84-69-5 | 13/01/2010 | No |
| Lead chromate | 7758-97-6 | 13/01/2010 | No |
| Lead chromate molybdate sulphate red (C.I. Pigment Red 104) | 12656-85-8 | 13/01/2010 | No |
| Lead sulfochromate yellow (C.I. Pigment Yellow 34) | 1344-37-2 | 13/01/2010 | No |
| Pitch, coal tar, high-temp. | 65996-93-2 | 13/01/2010 | No |
| Tris(2-chloroethyl) phosphate | 115-96-8 | 13/01/2010 | No |
| 4,4'- Diaminodiphenylmethane (MDA) | 101-77-9 | 28/10/2008 | No |
| 5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene) | 81-15-2 | 28/10/2008 | No |
| Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) | 85535-84-8 | 28/10/2008 | No |
| Anthracene | 120-12-7 | 28/10/2008 | No |
| Benzyl butyl phthalate (BBP) | 85-68-7 | 28/10/2008 | No |
| Bis (2-ethylhexyl)phthalate (DEHP) | 117-81-7 | 28/10/2008 | No |
| Bis(tributyltin) oxide (TBTO) | 56-35-9 | 28/10/2008 | No |
| Cobalt dichloride | 7646-79-9 | 28/10/2008 | No |
| Diarsenic pentaoxide | 1303-28-2 | 28/10/2008 | No |
| Diarsenic trioxide | 1327-53-3 | 28/10/2008 | No |
| Dibutyl phthalate (DBP) | 84-74-2 | 28/10/2008 | No |
| Hexabromocyclododecane (HBCDD) | - | 28/10/2008 | No |

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| gamma-hexabromocyclododecane | 134237-52-8 | 28/10/2008 | No |
| beta-hexabromocyclododecane | 134237-51-7 | 28/10/2008 | No |
| 1,2,5,6,9,10-hexabromocyclododecane | 3194-55-6 | 28/10/2008 | No |
| Hexabromocyclododecane | 25637-99-4 | 28/10/2008 | No |
| alpha-hexabromocyclododecane | 134237-50-6 | 28/10/2008 | No |
| Lead hydrogen arsenate | 7784-40-9 | 28/10/2008 | No |
| Sodium dichromate | 10588-01-9, 7789-12-0 | 28/10/2008 | No |
| Triethyl arsenate | 15606-95-8 | 28/10/2008 | No |

Name and Function of the Contact person responsible for REACH issues:

John M. Bonforte Sr. - General Manager & Technical Director

Date: 07/25/2017

Signature: *John M. Bonforte Sr.*