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**Certificate of EU REACH Compliance**

We hereby certify that any products do not contain substances from the “Candidate List of Substances of Very High Concern for Authorization” of REACH Regulation in thresholds exceeding 0.1% by weight (except for exempted products by the EU RoHS Directive).

## Candidate List of Substances of Very High Concern (Oct. 28, 2008)

No.	Substance Name	EC No.	CAS No.
1	Lead hydrogen arsenate	232-064-2	7784-40-9
2	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7
3	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9
4	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8
5	Anthracene	204-371-1	120-12-7
6	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: ( $\alpha$ -HBCDD, $\beta$ -HBCDD, $\gamma$ -HBCDD)	247-148-4 and 221-695-9	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)
7	Bis (2-ethylhexyl) phthalate (DEHP)	204-211-0	117-81-7
8	Bis (tributyltin) oxide (TBTO)	200-268-0	56-35-9
9	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2
10	Diarsenic trioxide	215-481-4	1327-53-3
11	Triethyl arsenate	427-700-2	15606-95-8
12	Diarsenic pentaoxide	215-116-9	1303-28-2
13	Sodium dichromate	234-190-3	7789-12-0, 10588-01-9
14	Dibutyl phthalate (DBP)	201-557-4	84-74-2
15	Cobalt dichloride	231-589-4	7646-79-9

## Candidate List of Substances of Very High Concern (Jan. 13, 2010)

No.	Substance Name	EC No.	CAS No.
16	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2
17	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8
18	2,4-Dinitrotoluene	204-450-0	121-14-2
19	Anthracene oil	292-602-7	90640-80-5
20	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2
21	Anthracene oil, anthracene-low	292-604-8	90640-82-7
22	Diisobutyl phthalate	201-553-2	84-69-5
23	Tris (2-chloroethyl) phosphate	204-118-5	115-96-8
24	Lead chromate	231-846-0	7758-97-6
25	Anthracene oil, anthracene paste	292-603-2	90640-81-6
26	Pitch, coal tar, high temp.	266-028-2	65996-93-2
27	Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4

Candidate List of Substances of Very High Concern (Mar. 30, 2010)

No.	Substance Name	EC No.	CAS No.
28	Acrylamide	201-173-7	79-06-1

Candidate List of Substances of Very High Concern (June 18, 2010)

No.	Substance Name	EC No.	CAS No.
29	Trichloroethylene	201-167-4	79-01-6
30	Potassium dichromate	231-906-6	7778-50-9
31	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
32	Boric acid Boric acid, crude natural EC No.:234-343-4   CAS No.:11113-50-1 Boric acid. EC No.:233-139-2   CAS No.:10043-35-3	-	-
33	Ammonium dichromate	232-143-1	7789-09-5
34	Sodium chromate	231-889-5	7775-11-3
35	Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3
36	Potassium chromate	232-140-5	7789-00-6

Candidate List of Substances of Very High Concern (Dec. 15, 2010)

No.	Substance Name	EC No.	CAS No.
37	Cobalt (II) diacetate	200-755-8	71-48-7
38	2-Ethoxyethanol	203-804-1	110-80-5
39	Cobalt (II) sulphate	233-334-2	10124-43-3
40	Acids generated from chromium trioxide and their oligomers. Oligomers of chromic acid and dichromic acid EC No.: -   CAS No.: - Dichromic acid EC No.:236-881-5   CAS No.:13530-68-2 Chromic acid EC No.:231-801-5   CAS No.:7738-94-5	231-801-5, 236-881-5	7738-94-5, 13530-68-2
41	2-Methoxyethanol	203-713-7	109-86-4
42	Chromium trioxide	215-607-8	1333-82-0
43	Cobalt (II) carbonate	208-169-4	513-79-1
44	Cobalt (II) dinitrate	233-402-1	10141-05-6

Candidate List of Substances of Very High Concern (June 20, 2011)

No.	Substance Name	EC No.	CAS No.
45	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6
46	Strontium chromate	232-142-6	7789-06-2
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4
48	1-Methyl-2-pyrrolidone	212-828-1	872-50-4
49	1,2,3-Trichloropropane	202-486-1	96-18-4
50	2-Ethoxyethyl acetate	203-839-2	111-15-9
51	Hydrazine	206-114-9	302-01-2, 7803-57-8

Candidate List of Substances of Very High Concern (Dec. 19, 2011)

No.	Substance Name	EC No.	CAS No.
52	Phenolphthalein	201-004-7	77-09-8
53	N,N-dimethylacetamide	204-826-4	127-19-5
54	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9
55	Lead diazide, Lead azide	236-542-1	13424-46-9
56	Lead dipicrate	229-335-2	6477-64-1
57	1,2-dichloroethane	203-458-1	107-06-2
58	Calcium arsenate	231-904-5	7778-44-1
59	Dichromium tris(chromate)	246-356-2	24613-89-6
60	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0
61	Pentazinc chromate octahydroxide	256-418-0	49663-84-5
62	Zirconia Aluminosilicate Refractory Ceramic Fibres		
63	Arsenic acid	231-901-9	7778-39-4
64	Potassium hydroxyoctaoxidizincatedichromate	234-329-8	11103-86-9
65	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4

No.	Substance Name	EC No.	CAS No.
66	Lead styphnate	239-290-0	15245-44-0
67	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
68	Trilead diarsenate	222-979-5	3687-31-8
69	Aluminosilicate Refractory Ceramic Fibres		
70	Bis(2-methoxyethyl) ether	203-924-4	111-96-6
71	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4

## Candidate List of Substances of Very High Concern (June 18, 2012)

No.	Substance Name	EC No.	CAS No.
72	$\alpha$ , $\alpha$ -Bis[4-(dimethylamino)phenyl]-4 (phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	229-851-8	6786-83-0
73	1,3,5-tris[(2S and2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione ( $\beta$ -TGIC)	423-400-0	59653-74-6
74	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1
75	Diboron trioxide	215-125-8	1303-86-2
76	1,2-bis(2-methoxyethoxy)ethane(TEGDME; triglyme)	203-977-3	112-49-2
77	Formamide	200-842-0	75-12-7
78	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	209-218-2	561-41-1
79	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2
80	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	208-953-6	548-62-9
81	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4
82	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26)	219-943-6	2580-56-5
83	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9
84	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	202-027-5	90-94-8

## Candidate List of Substances of Very High Concern (Dec. 19, 2012)

No.	Substance Name	EC No.	CAS No.
85	Hexahydromethylphthalic anhydride  Hexahydro-1-methylphthalic anhydride EC No.: 256-356-4   CAS No.: 48122-14-1 Hexahydromethylphthalic anhydride EC No.: 247-094-1   CAS No.: 25550-51-0 Hexahydro-3-methylphthalic anhydride EC No.: 260-566-1   CAS No.: 57110-29-9 Hexahydro-4-methylphthalic anhydride EC No.: 243-072-0   CAS No.: 19438-60-9	-	-
86	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8
87	Cyclohexane-1, 2-dicarboxylic anhydride  Cyclohexane-1,2-dicarboxylic anhydride EC No.: 201-604-9   CAS No.: 85-42-7 cis-cyclohexane-1,2-dicarboxylic anhydride EC No.: 236-086-3   CAS No.: 13149-00-3 trans-cyclohexane-1,2-dicarboxylic anhydride EC No.: 238-009-9   CAS No.: 14166-21-3	-	-
88	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8
89	Henicosafuoroundecanoic acid	218-165-4	2058-94-8
90	4-Aminoazobenzene	200-453-6	60-09-3
91	Silicic acid, lead salt	234-363-3	11120-22-2
92	Lead titanium zirconium oxide	235-727-4	12626-81-2
93	Lead monoxide (lead oxide)	215-267-0	1317-36-8
94	o-Toluidine	202-429-0	95-53-4
95	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2
96	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1
97	Lead bis (tetrafluoroborate)	237-486-0	13814-96-5
98	Lead dinitrate	233-245-9	10099-74-8
99	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	272-271-5	68784-75-8

No.	Substance Name	EC No.	CAS No.
100	Trilead bis (carbonate) dihydroxide	215-290-6	1319-46-6
101	4-4'-methylenedi-o-toluidine	212-658-8	838-88-0
102	Diethyl sulphate	200-589-6	64-67-5
103	Dimethyl sulphate	201-058-1	77-78-1
104	N,N-dimethylformamide	200-679-5	68-12-2
105	4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated  Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy- EC No.: -   CAS No.:9036-19-5 Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenyl ether EC No.: -   CAS No.:9002-93-1 20-[4-(1,1,3,3-tetramethylbutyl)phenoxy]-3,6,9,12,15,18-hexaoxaicosan-1-ol EC No.:219-682-8   CAS No.:2497-59-8 2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethanol EC No.: -   CAS No.:2315-67-5	-	-
106	4-Nonylphenol, branched and linear  p-(1,1-dimethylheptyl)phenol EC No.: 250-339-5   CAS No.: 30784-30-6 p-(1,1-dimethylheptyl)phenol EC No.: 241-427-4   CAS No.: 17404-66-9 p-nonylphenol EC No.: -   CAS No.: 104-40-5 4-(1-ethyl-1-methylhexyl)phenol EC No.: 257-907-1   CAS No.: 52427-13-1 p-isononylphenol EC No.: 247-770-6   CAS No.: 26543-97-5 4-(1-ethyl-1,3-dimethylpentyl)phenol EC No.: -   CAS No.: 186825-36-5 4-(1-ethyl-1,4-dimethylpentyl)phenol EC No.: -   CAS No.: 142731-63-3 Phenol, 4-nonyl-, branched EC No.: 284-325-5   CAS No.: 84852-15-3 4-(3-ethylheptan-2-yl)phenol EC No.: -   CAS No.: 186825-39-8 Nonylphenol EC No.: 246-672-0   CAS No.: 25154-52-3 Isononylphenol EC No.: 234-284-4   CAS No.: 11066-49-2 4-(1,1,5-Trimethylhexyl)phenol EC No.: -   CAS No.: 521947-27-3 Phenol, nonyl-, branched EC No.: 291-844-0   CAS No.: 90481-04-2	-	-
107	Furan	203-727-3	110-00-9
108	Lead oxide sulfate	234-853-7	12036-76-9
109	Lead titanium trioxide	235-038-9	12060-00-3
110	Bis (pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5
111	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7
112	1,2-Diethoxyethane	211-076-1	629-14-1
113	N-methylacetamide	201-182-6	79-16-3
114	Tetralead trioxide sulphate	235-380-9	12202-17-4
115	Acetic acid, lead salt, basic	257-175-3	51404-69-4
116	[Phthalato(2-)] dioxotrilead	273-688-5	69011-06-9
117	Tetraethyllead	201-075-4	78-00-2
118	N-pentyl-isopentylphthalate	-	776297-69-9
119	Pentalead tetraoxide sulphate	235-067-7	12065-90-6
120	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7
121	Tricosafuorododecanoic acid	206-203-2	307-55-1
122	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5
123	Dioxobis (stearato) trilead	235-702-8	12578-12-0
124	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8
125	Methoxyacetic acid	210-894-6	625-45-6
126	Methyloxirane (propylene oxide)	200-879-2	75-56-9
127	Trilead dioxide phosphonate	235-252-2	12141-20-7
128	o-aminoazotoluene	202-519-2	97-56-3
129	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7
130	Diisopentyl phthalate	210-088-4	605-50-5
131	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0
132	Biphenyl-4-ylamine	202-177-1	92-67-1
133	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8

No.	Substance Name	EC No.	CAS No.
134	Orange lead (lead tetroxide)	215-235-6	1314-41-6
135	4-4'-oxydianiline and its salts	202-977-0	101-80-4
136	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3
137	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7
138	Lead cyanamidate	244-073-9	20837-86-9

Candidate List of Substances of Very High Concern (June 20, 2013)

No.	Substance Name	EC No.	CAS No.
139	Cadmium	231-152-8	7440-43-9
140	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1
141	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1
142	Dipentyl phthalate (DPP)	205-017-9	131-18-0
143	4-Nonylphenol, branched and linear, ethoxylated		
144	Cadmium oxide	215-146-2	1306-19-0

Candidate List of Substances of Very High Concern (December 16, 2013)

No.	Substance Name	EC No.	CAS No.
145	Cadmium sulphide	215-147-8	1306-23-6
146	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
147	Dihexyl phthalate	201-559-5	84-75-3
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7
149	Trixylyl phosphate	246-677-8	25155-23-1
150	Disodium 3,3'-[[1,1'-biphenyl]-4, 4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0
151	Lead di (acetate)	206-104-4	301-04-2

Candidate List of Substances of Very High Concern (June 16, 2014)

No.	Substance Name	EC No.	CAS No.
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4
153	Cadmium chloride	233-296-7	10108-64-2
154	Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-
155	Sodium peroxometaborate	231-556-4	7632-04-4

Candidate List of Substances of Very High Concern (December 17, 2014)

No.	Substance Name	EC No.	CAS No.
156	Cadmium fluoride	232-222-0	7790-79-6
157	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)	-	-
158	2-ethylhexyl 10-ethyl-4, 4-dioctyl-7-oxo-8-oxa-3, 5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1
159	2-benzotriazol-2-yl-4, 6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7
160	Cadmium sulphate	233-331-6	10124-36-4, 31119-53-6
161	2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1

Candidate List of Substances of Very High Concern (June 15, 2015)

No.	Substance Name	EC No.	CAS No.
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
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]	-	-

## Candidate List of Substances of Very High Concern (December 17, 2015)

No.	Substance Name	EC No.	CAS No.
164	1,3-propanesultone	214-317-9	1120-71-4
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3
167	Nitrobenzene	202-716-0	98-95-3
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1, 21049-39-8, 4149-60-4

## Candidate List of Substances of Very High Concern (June 20, 2016)

No.	Substance Name	EC No.	CAS No.
169	Benzo[def]chrysene	200-028-5	50-32-8

## Candidate List of Substances of Very High Concern (January 12, 2017)

No.	Substance Name	EC No.	CAS No.
170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	201-245-8	80-05-7
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	206-400-3 - 221-470-5	335-76-2 3830-45-3 3108-42-7
172	p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6
173	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	-

## Candidate List of Substances of Very High Concern (July 7, 2017)

No.	Substance Name	EC No.	CAS No.
174	Perfluorohexane-1-sulphonic acid and its salts	-	-

## Candidate List of Substances of Very High Concern (January 15, 2018)

No.	Substance Name	EC No.	CAS No.
175	Benz[a]anthracene	200-280-6	56-55-3, 1718-53-2
176	Cadmium carbonate	208-168-9	513-78-0
177	Cadmium hydroxide	244-168-5	21041-95-2
178	Cadmium nitrate	223-710-6	10022-68-1, 10325-94-7
179	Chrysene	205-923-4	218-01-9, 1719-03-5
180	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.9.02,13.05,10]octadeca-7,15-diene ("Declorane Plus" <sup>TM</sup> ) 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 $\geq 0.1\%$ w/w 4-heptylphenol, branched and linear (4-HPbl)	-	-

## Candidate List of Substances of Very High Concern (June 27, 2018)

No.	Substance Name	EC No.	CAS No.
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	209-008-0	552-30-7
183	Benzo[ghi]perylene	205-883-8	191-24-2
184	Decamethylcyclopentasiloxane	208-764-9	541-02-6
185	Dicyclohexyl phthalate	201-545-9	84-61-7
186	Disodium octaborate	234-541-0	12008-41-2
187	Docecamethylcyclohexasiloxane	208-762-8	540-97-6
188	Ethylenediamine	203-468-6	107-15-3
189	Lead	231-100-4	7439-92-1
190	Octamethylcyclotetrasiloxane	209-136-7	556-67-2
191	Terphenyl, hydrogenated	262-967-7	61788-32-7



## Candidate List of Substances of Very High Concern (January 15, 2019)

No.	Substance Name	EC No.	CAS No.
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one 3-benzylidene camphor; 3-BC	239-139-9	15087-24-8
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	6807-17-6
194	Benzo[k]fluoranthene	205-916-6	207-08-9
195	Fluoranthene	205-912-4	26-44-0; 93951-69-0
196	Phenanthrene	201-581-5	85-01-8
197	Pyrene	204-927-3	129-00-0; 1718-52-1

## Candidate List of Substances of Very High Concern (July 16, 2019)

No.	Substance Name	EC No.	CAS No.
198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its salts and its acyl halides Covering any of their individual isomers and combinations thereof	-	-
199	2-methoxyethyl acetate	203-772-9	110-49-6
200	4-tert-butylphenol	202-679-0	98-54-4
201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-	-

## Candidate List of Substances of Very High Concern (Jan 16, 2020)

No.	Substance Name	EC No.	CAS No.
202	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-
203	Diisohexyl phthalate	276-090-2	71850-09-4
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	400-600-6	71868-10-5
205	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	404-360-3	119313-12-1

## Candidate List of Substances of Very High Concern (June 25, 2020)

No.	Substance Name	EC No.	CAS No.
206	Dibutylbis(pentane-2,4-dionato-o,o')tin	245-152-0	22673-19-4
207	Butyl 4-hydroxybenzoate	202-318-7	94-26-8
208	2-methylimidazole	211-765-7	693-98-1
209	1-vinylimidazole	214-012-0	1072-63-5

## Candidate List of Substances of Very High Concern (January 19, 2021)

No.	Substance Name	EC No.	CAS No.
210	Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. Wherein C12 is the predominant carbon number of the fatty acyloxy moiety  Diocetyl tin dilaurate EC No.:222-883-3   CAS No.:3648-18-8  Diocetyl tin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs. EC No.: -   CAS No.: -  Stannane, dioctyl-, bis (coco acyloxy) derivs. EC No.:293-901-5   CAS No.:91648-39-4	-	-
211	Bis(2-(2-methoxyethoxy)ethyl)ether	205-594-7	143-24-8

## Candidate List of Substances of Very High Concern (July 8, 2021)

No.	Substance Name	EC No.	CAS No.
212	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof (PDDP)		
	Phenol, 4-dodecyl, branched EC No.:310-154-3   CAS No.:121158-58-5		
	Phenol, (tetrapropenyl) derivatives EC No.: -   CAS No.:74499-35-7	-	-
	Phenol, 4-dodecyl, branched EC No.: -   CAS No.:210555-94-5		
	4-isododecylphenol EC No.: -   CAS No.:27459-10-5		
	Phenol, tetrapropylene- EC No.: -   CAS No.:57427-55-1		
213	Phenol, 4-isododecyl- EC No.: -   CAS No.:27147-75-7		
	orthoboric acid, sodium salt		
	boric acid (H3BO3), sodium salt, hydrate EC No.: -   CAS No.:25747-83-5		
	Boric acid (H3BO3), disodium salt EC No.: -   CAS No.:22454-04-2		
	Trisodium orthoborate EC No.:238-253-6   CAS No.:14312-40-4	-	-
	Boric acid, sodium salt EC No.:215-604-1   CAS No.:1333-73-9		
214	Orthoboric acid, sodium salt EC No.:237-560-2   CAS No.:13840-56-7		
	Boric acid (H3BO3), sodium salt (1:1) EC No.: -   CAS No.:14890-53-0		
	Medium-chain chlorinated paraffins (MCCP)		
	Alkanes, C14-16, chloro EC No.: -   CAS No.:1372804-76-6		
	Alkanes, C14-17, chloro EC No.:287-477-0   CAS No.:85535-85-9	-	-
215	di-, tri- and tetrachlorotetradecane EC No.:950-299-5   CAS No.: -		
	Tetradecane, chloro derivs EC No.: -   CAS No.:198840-65-2		
216	glutaral	203-856-5	111-30-8
216	4,4'-(1-methylpropylidene)bisphenol	201-025-1	77-40-7
217	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers		
	(2R)-3-(4-tert-butylphenyl)-2-methylpropanal EC No.: -   CAS No.:75166-31-3	-	-
	2-(4-tert-butylbenzyl)propionaldehyde EC No.: -   CAS No.:80-54-6		
	(2S)-3-(4-tert-butylphenyl)-2-methylpropanal EC No.: -   CAS No.:75166-30-2		



No.	Substance Name	EC No.	CAS No.
218	2,2-bis(bromomethyl)propane-1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	-	-
	2,2-dimethylpropan-1-ol, tribromo derivative (TBNPA) EC No.:253-057-0   CAS No.:36483-57-5		
	3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA) EC No.:   CAS No.:1522-92-5		
	2,2-bis(bromomethyl)propane-1,3-diol (BMP) EC No.:221-967-7   CAS No.:3296-90-0		
219	1,4-dioxane	204-661-8	123-99-1

Candidate List of Substances of Very High Concern (January 17, 2022)

No.	Substance Name	EC No.	CAS No.
220	tris(2-methoxyethoxy)vinylsilane	213-934-0	1067-53-4
221	S-(tricyclo(5.2.1.0'2,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	401-850-9	255881-94-8
222	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	204-327-1	119-47-1
223	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-	-
	(3E)-1,7,7-trimethyl-3-(4'-methylbenzylidene)bicyclo[2.2.1]heptan-2-one EC No.:   CAS No.:1782069-81-1		
	(1R,3E,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one EC No.:   CAS No.:95342-41-9		
	(1S,3Z,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one EC No.:   CAS No.:852541-25-4		
	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one EC No.:253-242-6   CAS No.:36861-47-9		
	(1R,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one EC No.:   CAS No.:741687-98-9		
	(1R,3E,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one EC No.:   CAS No.:852541-30-1		
(1R,3Z,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one EC No.:   CAS No.:852541-21-0			

Candidate List of Substances of Very High Concern (June 10, 2022)

No.	Substance Name	EC No.	CAS No.
224	N-(Hydroxymethyl)acrylamide	213-103-2	924-42-5

## Candidate List of Substances of Very High Concern (January 17, 2023)

No.	Substance Name	EC No.	CAS No.
225	reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	473-390-7	-
226	Perfluoroheptanoic acid and its salts  Ammonium perfluoroheptanoate EC No.:228-098-2   CAS No.:6130-43-4  potassium perfluoroheptanoate EC No.: -   CAS No.:21049-36-5  Perfluoroheptanoic acid EC No.206-798-9   CAS No.:375-85-9  Sodium perfluoroheptanoate EC No.:243-518-4   CAS No.:20109-59-5	-	-
227	Melamine	203-615-4	108-78-1
228	Isobutyl 4-hydroxybenzoate	224-208-8	4247-02-3
229	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof  Bis(2-ethylhexyl) tetrabromophthalate EC No.:247-426-5   CAS No.:26040-51-7	-	-
230	Barium diboron tetraoxide	237-222-4	13701-59-2
231	4,4'-sulphonyldiphenol	201-250-5	80-09-1
232	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	201-236-9	79-94-7
233	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	253-692-3	37853-59-1

as of March 2023

## Candidate List of Substances of Very High Concern (June 14, 2023)

No.	Substance Name	EC No.	CAS No.
234	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	278-355-8	75980-60-8
235	Bis(4-chlorophenyl) sulphone	201-247-9	80-07-9

as of June 2023

## Candidate List of Substances of Very High Concern (January 23, 2024)

No.	Substance Name	EC No.	CAS No.
236	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol  Phenol, methylstyreneated EC No.:270-966-8   CAS No.:68512-30-1	700-960-7	-
237	Bumetrizole (UV-326)	223-445-4	3896-11-5
238	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	438-340-0	119344-86-4
239	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	221-573-5	3147-75-9
240	2,4,6-tri-tert-butylphenol	211-989-5	732-26-3

as of January 2024

A list of all Substances of Very High Concern is available here:

<https://echa.europa.eu/candidate-list-table>

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