

Information in relation to EU REACH-SVHC (Candidate List of substances of very high concern)

There is no intentional use exceeding the reference value of REACH-SVHC (Candidate List of substances of very high concern) except the substance described below in our semiconductor products limited to active products listed in this web site.

Reference value : Less than 0.1% in the product.

*Power module type--- Less than 0.1% in the component unit

Substances : Refer to attached "Substance list".

Substance with containment information :

Lead (High melting temperature type solder)

【Note】

We do not guarantee the contents of the substance list above.

For the official version, please refer to Candidate List of ECHA (European Chemicals Agency).

Please refer to Candidate List of ECHA (European Chemicals Agency) in official.

If you need Non-Use Warranty Certificate, containment amount and more detailed information, please contact our sales office.

1RE-180185-4-20200121

Substance list (201 substances)

1RE-180187-4-20200121

No.	Substances	CAS No.
1	Anthracene	120-12-7
2	4,4'-Diaminodiphenylmethane	101-77-9
3	Dibutyl phthalate	84-74-2
4	Cobalt dichloride	7646-79-9
5	Diarsenic pentaoxide	1303-28-2
6	Diarsenic trioxide	1327-53-3
7	Sodium dichromate	7789-12-0 10588-01-9
8	5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	81-15-2
9	Bis(2-ethyl(hexyl)phthalate)(DEHP)	117-81-7
10	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α - HBCDD, β -HBCDD, γ -HBCDD)	25637-99-4 3194-55-6 (134237-50-6, 134237-51-7, 134237-52-8)
11	Alkanes, c10-13, chloro(Short Chain Chlorinated paraffins)	85535-84-8
12	Bis(tributyltin)oxide	56-35-9
13	Lead hydrogen arsenate	7784-40-9
14	Triethyl arsenate	15606-95-8
15	Benzyl butyl phthalate	85-68-7
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 temperature	65996-93-2
22	2,4-Dinitrotoluene	121-14-2
23	Diisobutyl phthalate	84-69-5
24	Lead chromate	7758-97-6
25	Lead chromate molybdate sulphate red (C.I. Pigment Yellow 34)	12656-85-8
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2
27	Tris(2-chloroethyl)phosphate	115-96-8
28	Acrylamide	79-06-1
29	Trichloroethylene	79-01-6
30	Boric acid	10043-35-3 11113-50-1
31	Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3
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	Group containing Chromic acid, Dichromic acid, Oligomers for chromic acid and dichromic acid.	7738-94-5 13530-68-2 -
45	2-ethoxyethyl acetate	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	302-01-2
49	Hydrazine, monohydrate	7803-57-8
49	1-methyl-2-pyrrolidone	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	Zirconia Aluminosilicate Refractory Ceramic Fibres	-
53	Calcium arsenate	7778-44-1
54	Bis(2-methoxyethyl) ether	111-96-6
55	Aluminosilicate Refractory Ceramic Fibres	-
56	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9
57	Lead dipicrate	6477-64-1
58	N,N-dimethylacetamide	127-19-5
59	Arsenic acid	7778-39-4
60	2-Methoxyaniline; o-Anisidine	90-04-0
61	Trilead diarsenate	3687-31-8
62	1,2-dichloroethane	107-06-2
63	Pentazine chromate octahydroxide	49663-84-5
64	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9
65	Formaldehyde, oligomeric reaction products with aniline	25214-70-4
66	Bis(2-methoxyethyl) phthalate	117-82-8
67	Lead diazide, Lead azide	13424-46-9
68	Lead styphnate	15245-44-0

No.	Substances	CAS No.
69	2,2'-dichloro-4,4'-methylenedianiline	101-14-4
70	Phenolphthalein	77-09-8
71	Dichromium tris(chromate)	24613-89-6
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	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8
76	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9
77	[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
78	Diboron trioxide	1303-86-2
79	Formamide	75-12-7
80	Lead(II) bis(methanesulfonate)	17570-76-2
81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1
82	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9
83	α , α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0
84	β -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5
86	Pentacosafuorotridecanoic acid	72629-94-8
87	Tricosafuorododecanoic acid	307-55-1
88	Henicosafuoroundecanoic acid	2058-94-8
89	Heptacosafuorotetradecanoic acid	376-06-7
90	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3
91	Cyclohexane-1,2-dicarboxylic anhydride cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7 13149-00-3 14166-21-3
92	Hexahydromethylphthalic anhydride Hexahydro-4-methylphthalic anhydride Hexahydro-1-methylphthalic anhydride Hexahydro-3-methylphthalic anhydride	25550-51-0 19438-60-9 48122-14-1 57110-29-9
93	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 erll-defined substances which include any of the individual isomers or a combination thereof]	-
94	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-
95	Methoxyacetic acid	625-45-6
96	N,N-dimethylformamide	68-12-2
97	Dibutyltin dichloride (DBTC)	683-18-1
98	Lead monoxide (Lead oxide)	1317-36-8
99	Orange lead (Lead tetroxide)	1314-41-6
100	Lead bis(tetrafluoroborate)	13814-96-5
101	Trilead bis(carbonate)dihydroxide	1319-46-6
102	Lead titanium trioxide	12060-00-3
103	Lead titanium zirconium oxide	12626-81-2
104	Silicic acid, lead salt	11120-22-2
105	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	68784-75-8
106	1-bromopropane (n-propyl bromide)	106-94-5
107	Methylloxirane (Propylene oxide)	75-56-9
108	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
109	Diisopentylphthalate (DIPP)	605-50-5
110	N-pentyl-isopentylphthalate	776297-69-9
111	1,2-Diethoxyethane	629-14-1
112	Acetic acid, lead salt, basic	51404-69-4
113	Lead oxide sulfate	12036-76-9
114	[Phthalato(2-)]dioxotrilead	69011-06-9
115	Dioxobis(stearato)trilead	12578-12-0
116	Fatty acids, C16-18, lead salts	91031-62-8
117	Lead cyanamide	20837-86-9
118	Lead dinitrate	10099-74-8
119	Pentalead tetraoxide sulphate	12065-90-6
120	Pyrochlor, antimony lead yellow	8012-00-8
121	Sulfurous acid, lead salt, dibasic	62229-08-7
122	Tetraethyllead	78-00-2
123	Trilead trioxide sulphate	12202-17-4
124	Trilead dioxide phosphonate	12141-20-7
125	Furan	110-00-9
126	Diethyl sulphate	64-67-5
127	Dimethyl sulphate	77-78-1
128	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2
129	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7
130	4,4'-methylenedi-o-toluidine	838-88-0
131	4,4'-oxydianiline and its salts	101-80-4
132	4-Aminoazobenzene	60-09-3

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No.	Substances	CAS No.
133	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7
134	6-methoxy-m-toluidine (p-cresidine)	120-71-8
135	Biphenyl-4-ylamine	92-67-1
136	o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]	97-56-3
137	o-Toluidine	95-53-4
138	N-methylacetamide	79-16-3
139	Cadmium	7440-43-9
140	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
141	Pentadecafluorooctanoic acid (PFOA)	335-67-1
142	Dipentyl phthalate (DPP)	131-18-0
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	Cadmium oxide	1306-19-0
145	Cadmium sulphide	1306-23-6
146	Diethyl phthalate	84-75-3
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
148	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
149	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7
150	Lead diacetate	301-04-2
151	Triethyl phosphate	25155-23-1
152	1,2-Benzenedicarboxylic acid, diethyl 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	Cadmium fluoride	7790-79-6
157	Cadmium sulphate	10124-36-4 31119-53-6
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1
161	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)	-
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 diethyl phthalate (EC No. 201-559-5)	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 isomers of [1] and [2] or any combination thereof]	-
164	1,3-propanesultone	1120-71-4
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
167	Nitrobenzene	98-95-3
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononanoic 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
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	-
172	Nonadecafluorodecanoic acid	335-76-2
	Ammonium nonadecafluorodecanoate	3108-42-7
	Decanoic acid, nonadecafluoro-, sodium salt	3830-45-3
171	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	p-(1,1-dimethylpropyl)phenol	80-46-6
174	Perfluorohexane-1-sulphonic acid and its salts(PFHxS)	-
175	Benz[a]anthracene	56-55-3 1718-53-2
176	Cadmium carbonate	513-78-0
177	Cadmium hydroxide	21041-95-2
178	Cadmium nitrate; Cadmium dinitrate tetrahydrate	10022-68-1 10325-94-7
179	Chrysene	218-01-9 1719-03-5

No.	Substances	CAS No.
180	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo [12.2.1.16.9.02.13.05.10]octadeca-7,15-diene ("Dechlorane Plus™") [covering any of its individual anti- and syn-isomers or any combination thereof]	13560-89-9 135821-74-8 135821-03-3
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	93925-00-9
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride(trimellitic anhydride)(TMA)	552-30-7
183	Benzo[ghi]perylene	191-24-2
184	Decamethylcyclopentasiloxane(D5)	541-02-6
185	Dicyclohexyl phthalate(DCHP)	84-61-7
186	Disodium octaborate	12008-41-2
187	Dodecamethylcyclohexasiloxane(D6)	540-97-6
188	Ethylenediamine	107-15-3
189	Lead	7439-92-1
190	Octamethylcyclotetrasiloxane	556-67-2
191	Terphenyl, hydrogenated	61788-32-7
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6
194	Benzo[k]fluoranthene	207-08-9
195	Fluoranthene	206-44-0
196	Fluoranthene-D10, 98 atom % D	93951-69-0
196	Phenanthrene	85-01-8
197	Pyrene	129-00-0
	Pyrene-d10	1718-52-1
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	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)	-