

TOREX SEMICONDUCTOR LTD.
 Unizo Shinkawa Eitai Dori Bldg. 3F
 1-24-1 Shinkawa, Chuo-ku
 Tokyo 104-0033 Japan
 Phone: +81-3-6222-2851
 Fax: +81-3-6222-2892
<http://www.torexsemi.com>

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: (α -HBCDD, β -HBCDD, γ -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

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

No.	Substance name	EC No.	CAS No.
15	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2
16	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8
17	2,4-Dinitrotoluene	204-450-0	121-14-2
18	Anthracene oil	292-602-7	90640-80-5
19	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2
20	Anthracene oil, anthracene-low	292-604-8	90640-82-7
21	Diisobutyl phthalate	201-553-2	84-69-5
22	Tris (2-chloroethyl) phosphate	204-118-5	115-96-8
23	Lead chromate	231-846-0	7758-97-6
24	Anthracene oil, anthracene paste	292-603-2	90640-81-6
25	Pitch, coal tar, high temp.	266-028-2	65996-93-2
26	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.
27	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.
28	Trichloroethylene	201-167-4	79-01-6
29	Potassium dichromate	231-906-6	7778-50-9
30	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
31	Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1
32	Ammonium dichromate	232-143-1	7789-09-5
33	Sodium chromate	231-889-5	7775-11-3
34	Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3
35	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.
36	Cobalt (II) diacetate	200-755-8	71-48-7
37	2-Ethoxyethanol	203-804-1	110-80-5
38	Cobalt (II) sulphate	233-334-2	10124-43-3
39	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	231-801-5, 236-881-5	7738-94-5, 13530-68-2
40	2-Methoxyethanol	203-713-7	109-86-4
41	Chromium trioxide	215-607-8	1333-82-0
42	Cobalt (II) carbonate	208-169-4	513-79-1
43	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.
44	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6
45	Strontium chromate	232-142-6	7789-06-2
46	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4
47	1-Methyl-2-pyrrolidone	212-828-1	872-50-4
48	1,2,3-Trichloropropane	202-486-1	96-18-4
49	2-Ethoxyethyl acetate	203-839-2	111-15-9
50	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.
51	Phenolphthalein	201-004-7	77-09-8
52	N,N-dimethylacetamide	204-826-4	127-19-5
53	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9
54	Lead diazide, Lead azide	236-542-1	13424-46-9
55	Lead dipicrate	229-335-2	6477-64-1
56	1,2-dichloroethane	203-458-1	107-06-2
57	Calcium arsenate	231-904-5	7778-44-1
58	Dichromium tris(chromate)	246-356-2	24613-89-6
59	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0
60	Pentazinc chromate octahydroxide	256-418-0	49663-84-5
61	Zirconia Aluminosilicate Refractory Ceramic Fibres		
62	Arsenic acid	231-901-9	7778-39-4
63	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9
64	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4
65	Lead styphnate	239-290-0	15245-44-0
66	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
67	Trilead diarsenate	222-979-5	3687-31-8
68	Aluminosilicate Refractory Ceramic Fibres		
69	Bis(2-methoxyethyl) ether	203-924-4	111-96-6
70	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.
71	Cobalt Dichloride	231-589-4	7646-79-9
72	α, α -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 and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -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 [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
86	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8
87	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
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 ₂ Si ₂ O ₅), barium salt (1:1), lead-doped	272-271-5	68784-75-8
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		
106	4-Nonylphenol, branched and linear		
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	Tetrolead trioxide sulphate	235-380-9	12202-17-4

No.	Substance name	EC No.	CAS No.
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	Diisopentylphthalate	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
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 $\geq 0.3\%$ 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	Perfluoronon-1-oi-c-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	Dodecachloropentacyclo[12.2.1,9.02,13.05,10]octadeca-7,15-diene ("Declorane Plus" TM) 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	Decamethylcyclotrasiloxane	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

as of July 2020

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

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

Masashi Watakabe

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Manager, Quality Assurance Dept.