

**TEIJIN**

**TEIJIN LIMITED**

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To whom it may concern

**CERTIFICATE**

We hereby certify that the following products are true and correct to the best of knowledge.

Products: Panlite®  
Panlite®Sheet  
Panlite®Film  
Multilon®  
Metamarble®  
PURE-ACE®  
ELECLEAR®

We do not use the substances listed on "Candidate List of Substances of Very High Concern for Authorization" accordance with EU REACH regulation (168 substances, updated on 17/Dec/2015) for our products intentionally.



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Shuji Yoshida  
Manager  
Environment Quality Assurance Department  
Electric Materials & Performance Polymer Products Business Group

&lt;Attached file&gt;

## Candidate List of Substances of Very High Concern for Authorization (updated on 15/Jun/2015)

	Substance name	EC No.	CAS No.
1	Triethyl arsenate	427-700-2	15606-95-8
2	Anthracene	204-371-1	120-12-7
3	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9
4	Dibutyl phthalate (DBP)	201-557-4	84-74-2
5	Cobalt dichloride	231-589-4	7646-79-9
6	Diarsenic pentaoxide	215-116-9	1303-28-2
7	Diarsenic trioxide	215-481-4	1327-53-3
8	Sodium dichromate	234-190-3	7789-12-0, 10588-01-9
9	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2
10	Bis (2-ethylhexyl)phthalate(DEHP)	204-211-0	117-81-7
11	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4, 221-695-9	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)
12	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8
13	Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9
14	Lead hydrogen arsenate	232-064-2	7784-40-9
15	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7
16	Anthracene oil	292-602-7	90640-80-5
17	Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4
18	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2
19	Anthracene oil, anthracene-low	292-604-8	90640-82-7
20	Anthracene oil, anthracene paste	292-603-2	90640-81-6
21	Coal tar pitch, high temperature	266-028-2	65996-93-2
22	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)	-	-
23	Aluminosilicate Refractory Ceramic Fibres (RCF)	-	-
24	2,4-Dinitrotoluene	204-450-0	121-14-2
25	Diisobutyl phthalate	201-553-2	84-69-5
26	Lead chromate	231-846-0	7758-97-6
27	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8
28	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2
29	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8
30	Acrylamide	201-173-7	79-06-1
31	Trichloroethylene	201-167-4	79-01-6
32	Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1
33	Disodium tetraborate, anhydrous	215-540-4	1330-43-4, 12179-04-3, 1303-96-4
34	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
35	Sodium chromate	231-889-5	7775-11-3
36	Potassium chromate	232-140-5	7789-00-6
37	Ammonium dichromate	232-143-1	7789-09-5
38	Potassium dichromate	231-906-6	7778-50-9
39	Cobalt(II) sulphate	233-334-2	10124-43-3
40	Cobalt(II) dinitrate	233-402-1	10141-05-6
41	Cobalt(II) carbonate	208-169-4	513-79-1
42	Cobalt(II) diacetate	200-755-8	71-48-7
43	2-Methoxyethanol	203-713-7	109-86-4

	Substance name	EC No.	CAS No.
44	2-Ethoxyethanol	203-804-1	110-80-5
45	Chromium trioxide	215-607-8	1333-82-0
46	Acids generated from chromium trioxide 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
47	2-Ethoxyethyl acetate	203-839-2	111-15-9
48	Strontium chromate	232-142-6	7789-06-2
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4
50	Hydrazine	206-114-9	7803-57-8, 302-01-2
51	1-Methyl-2-pyrrolidone	212-828-1	872-50-4
52	1,2,3-Trichloropropane	202-486-1	96-18-4
53	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6
54	Lead styphnate	239-290-0	15245-44-0
55	Lead azide Lead diazide	236-542-1	13424-46-9
56	Lead dipicrate	229-335-2	6477-64-1
57	Phenolphthalein	201-004-7	77-09-8
58	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	202-918-9	101-14-4
59	N,N-dimethylacetamide (DMAC)	204-826-4	127-19-5
60	Trilead diarsenate	222-979-5	3687-31-8
61	Calcium arsenate	231-904-5	7778-44-1
62	Arsenic acid	231-901-9	7778-39-4
63	Bis(2-methoxyethyl) ether	203-924-4	111-96-6
64	1,2-Dichloroethane	203-458-1	107-06-2
65	4-(1,1,3,3-tetramethylbutyl)phenol; 4-tert-Octylphenol	205-426-2	140-66-9
66	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0
67	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
68	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	500-036-1	25214-70-4
69	Pentazinc chromate octahydroxide	256-418-0	49663-84-5
70	Potassium hydroxyoctaoxodizincatedi-chromate	234-329-8	11103-86-9
71	Dichromium tris(chromate)	246-356-2	24613-89-6
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4
74	Diboron trioxide	215-125-8	1303-86-2
75	Formamide	200-842-0	75-12-7
77	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2
77	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC)	219-514-3	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 ( $\beta$ -TGIC)	423-400-0	59653-74-6
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1
81	[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
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	$\alpha, \alpha$ -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1- methanol (C.I. Solvent Blue 4)	229-851-8	6786-83-0
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	209-218-2	561-41-1
85	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9
86	Dibutyltin dichloride (DBT)	211-670-0	683-18-1
87	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5
88	N,N-dimethylformamide; dimethyl formamide	200-679-5	68-12-2

	Substance name	EC No.	CAS No.
89	Pentalead tetraoxide sulphate	235-067-7	12065-90-6
90	Silicic acid, barium salt, lead-doped	272-271-5	68784-75-8
91	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7
92	4-Aminoazobenzene; 4-Phenylazoaniline	200-453-6	60-9-3
93	4,4'-oxydianiline and its salts	202-977-0	101-80-4
94	Trilead dioxide phosphonate	235-252-2	12141-20-7
95	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated – covering well-defined substances and UVCB substances, polymers and homologues	-	-
96	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7
97	o-Toluidine; 2-Aminotoluene	202-429-0	95-53-4
98	1-bromopropane	203-445-0	106-94-5
99	o-aminoazotoluene	202-591-2	97-56-3
100	Dinoseb	201-861-7	88-85-7
101	Trilead bis(carbonate)dihydroxide (basic lead carbonate)	215-290-6	1319-46-6
102	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2
103	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0
104	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0
105	Lead oxide sulfate	234-853-7	12036-76-9
106	Lead dinitrate	233-245-9	10099-74-8
107	Propylene oxide; 1,2-epoxypropane; methyloxirane	200-879-2	75-56-9
108	Lead titanium trioxide	235-038-9	12060-00-3
109	Silicic acid, lead salt	234-363-3	11120-22-2
110	Methoxy acetic acid	210-894-6	625-45-6
111	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8
112	Dimethyl sulphate	201-058-1	77-78-1
113	Bis(pentabromophenyl) ether (DecaBDE)	214-604-9	1163-19-5
114	Lead oxide (lead monoxide)	215-267-0	1317-36-8
115	Acetic acid, lead salt, basic	257-175-3	51404-69-4
116	Furan	203-727-3	110-00-9
117	Tetraethyllead	201-075-4	78-00-2
118	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8
119	Henicosafuoroundecanoic acid	218-165-4	2058-94-8
120	1,2-Diethoxyethane	211-076-1	629-14-1
121	Lead cyanamidate	244-073-9	20837-86-9
122	Hexahydro-2-benzofuran-1,3-dione (HHPA), cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3
123	N-pentyl-isopentylphthalate	-	776297-69-9
124	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	202-453-1	95-80-7
125	Lead tetroxide (orange lead)	215-235-6	1314-41-6
126	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8
127	Diethyl sulphate	200-589-6	64-67-5
128	Tetralead trioxide sulphate	235-380-9	12202-17-4
129	Diisopentylphthalate	210-088-4	605-50-5
130	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9
131	Dioxobis(stearato)trilead	235-702-8	12578-12-0
132	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3
133	N-methylacetamide	201-182-6	79-16-3
134	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8
135	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	-	-
136	Biphenyl-4-ylamine	202-177-1	92-67-1
137	Tricosafuorododecanoic acid	206-203-2	307-55-1
138	Lead Titanium Zirconium Oxide	235-727-4	12626-81-2

	Substance name	EC No.	CAS No.
139	Cadmium	231-152-8	7440-43-9
140	Cadmium oxide	215-146-2	1306-19-0
141	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1
142	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1
143	Dipentyl phthalate (DPP)	205-017-9	131-18-0
144	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]	-	-
145	Cadmium sulphide	215-147-8	1306-23-6
146	Dihexyl phthalate	201-559-5	84-75-3
147	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
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)	217-710-3	1937-37-7
149	Imidazolidine-2-thione; 2-imidazoline-2-thiol	202-506-9	96-45-7
150	Lead di(acetate)	206-104-4	301-04-2
151	Trixylyl phosphate	246-677-8	25155-23-1
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4
153	Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-
154	Sodium peroxometaborate	231-556-4	7632-04-4
155	Cadmium chloride	233-296-7	10108-64-2
156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1
157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7
158	Cadmium fluoride	232-222-0	7790-79-6
159	Cadmium sulphate	233-331-6	10124-36-4; 31119-53-6
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	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 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]	-	-
164	Nitrobenzene	202-716-0	98-95-3
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	1,3-propanesultone	214-317-9	1120-71-4
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	375-95-1 21049-39-8 4149-60-4