



# PFC Device Corporation

## Certificate of Non-Use of REACH SVHC

PFC declares that all molding materials used in products delivered to your company are RoHS Compliance and do not use any of following REACH SVHC list substances at a concentration beyond 0.1% weight by weight.

### REACH SVHC List

NO	Substance name	EC number	CAS number	Date of inclusion
1	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)	2008/10/28
2	Anthracene	204-371-1	120-12-7	2008/10/28
3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	2008/10/28
4	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9	2008/10/28
5	Dibutyl phthalate (DBP)	201-557-4	84-74-2	2008/10/28
6	Sodium dichromate	234-190-3	7789-12-0, 10588-01-9	2008/10/28
7	Diarsenic pentaoxide	215-116-9	1303-28-2	2008/10/28
8	Triethyl arsenate	427-700-2	15606-95-8	2008/10/28
9	Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	2008/10/28
10	Diarsenic trioxide	215-481-4	1327-53-3	2008/10/28
11	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	2008/10/28
12	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7	2008/10/28
13	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	2008/10/28
14	Lead hydrogen arsenate	232-064-2	7784-40-9	2008/10/28
15	Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4	2010/1/13
16	Pitch, coal tar, high temp.	266-028-2	65996-93-2	2010/1/13
17	Anthracene oil, anthracene paste	292-603-2	90640-81-6	2010/1/13
18	Lead chromate	231-846-0	7758-97-6	2010/1/13
19	Diisobutyl phthalate	201-553-2	84-69-5	2010/1/13
20	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	2010/1/13
21	Anthracene oil, anthracene-low	292-604-8	90640-82-7	2010/1/13
22	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	2010/1/13
23	2,4-Dinitrotoluene	204-450-0	121-14-2	2010/1/13
24	Anthracene oil	292-602-7	90640-80-5	2010/1/13
25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	2010/1/13
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	2010/1/13
27	Acrylamide	201-173-7	79-06-1	2010/3/30
28	Potassium chromate	232-140-5	7789-00-6	2010/6/18
29	Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3	2010/6/18
30	Sodium chromate	231-889-5	7775-11-3	2010/6/18
31	Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1	2010/6/18
32	Ammonium dichromate	232-143-1	7789-09-5	2010/6/18
33	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	2010/6/18
34	Potassium dichromate	231-906-6	7778-50-9	2010/6/18
35	Trichloroethylene	201-167-4	79-01-6	2010/6/18
36	Cobalt(II) dinitrate	233-402-1	10141-05-6	2010/12/15
37	Cobalt(II) carbonate	208-169-4	513-79-1	2010/12/15
38	Chromium trioxide	215-607-8	1333-82-0	2010/12/15
39	2-Methoxyethanol	203-713-7	109-86-4	2010/12/15
40	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	2010/12/15
41	2-Ethoxyethanol	203-804-1	110-80-5	2010/12/15
42	Cobalt(II) sulphate	233-334-2	10124-43-3	2010/12/15

43	Cobalt(II) diacetate	200-755-8	71-48-7	2010/12/15
44	Hydrazine	206-114-9	302-01-2, 7803-57-8	2011/6/20
45	2-Ethoxyethyl acetate	203-839-2	111-15-9	2011/6/20
46	1,2,3-Trichloropropane	202-486-1	96-18-4	2011/6/20
47	1-Methyl-2-pyrrolidone	212-828-1	872-50-4	2011/6/20
48	Strontium chromate	232-142-6	7789-06-2	2011/6/20
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl	271-084-6	68515-42-4	2011/6/20
50	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-	276-158-1	71888-89-6	2011/6/20
51	Cobalt dichloride	231-589-4	7646-79-9	2011/06/20 - 2008/10/28
52	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	2011/12/19
53	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	2011/12/19
54	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and pac	-	-	2011/12/19
55	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	2011/12/19
56	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling	-	-	2011/12/19
57	Trilead diarsenate	222-979-5	3687-31-8	2011/12/19
58	Lead styphnate	239-290-0	15245-44-0	2011/12/19
59	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	2011/12/19
60	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	2011/12/19
61	Arsenic acid	231-901-9	7778-39-4	2011/12/19
62	Pentazinc chromate octahydroxide	256-418-0	49663-84-5	2011/12/19
63	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	2011/12/19
64	Dichromium tris(chromate)	246-356-2	24613-89-6	2011/12/19
65	Calcium arsenate	231-904-5	7778-44-1	2011/12/19
66	1,2-dichloroethane	203-458-1	107-06-2	2011/12/19
67	Lead dipicrate	229-335-2	6477-64-1	2011/12/19
68	Lead diazide, Lead azide	236-542-1	13424-46-9	2011/12/19
69	Phenolphthalein	201-004-7		2011/12/19
70	N,N-dimethylacetamide	204-826-4	127-19-5	2011/12/19
71	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	2011/12/19
72	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	2012/6/18
73	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	2012/6/18
74	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	219-943-6	2580-56-5	2012/6/18
75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	2012/6/18
76	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	208-953-6	548-62-9	2012/6/18
77	Formamide	200-842-0	75-12-7	2012/6/18
78	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	2012/6/18
79	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	209-218-2	561-41-1	2012/6/18
80	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	2012/6/18
81	Diboron trioxide	215-125-8	1303-86-2	2012/6/18
82	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	2012/6/18
83	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	2012/6/18

84	$\alpha,\alpha$ -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	229-851-8	6786-83-0	2012/6/18
85	Lead cyanamidate	244-073-9	20837-86-9	2012/12/19
86	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	2012/12/19
87	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	2012/12/19
88	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	2012/12/19
89	Diisopentylphthalate	210-088-4	605-50-5	2012/12/19
90	Biphenyl-4-ylamine	202-177-1	92-67-1	2012/12/19
91	Orange lead (lead tetroxide)	215-235-6	1314-41-6	2012/12/19
92	4,4'-oxydianiline and its salts	202-977-0	101-80-4	2012/12/19
93	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	2012/12/19
94	o-aminoazotoluene	202-591-2	97-56-3	2012/12/19
95	Trilead dioxide phosphonate	235-252-2	12141-20-7	2012/12/19
96	Methyloxirane (Propylene oxide)	200-879-2	75-56-9	2012/12/19
97	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	2012/12/19
98	Methoxyacetic acid	210-894-6	625-45-6	2012/12/19
99	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	2012/12/19
100	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	2012/12/19
101	Tricosafuorododecanoic acid	206-203-2	307-55-1	2012/12/19
102	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	2012/12/19
103	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	2012/12/19
104	Tetraethyllead	201-075-4	78-00-2	2012/12/19
105	Dioxobis(stearato)trilead	235-702-8	12578-12-0	2012/12/19
106	N-pentyl-isopentylphthalate	-	776297-69-9	2012/12/19
107	Tetralead trioxide sulphate	235-380-9	12202-17-4	2012/12/19
108	1,2-Diethoxyethane	211-076-1	629-14-1	2012/12/19
109	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	2012/12/19
110	N-methylacetamide	201-182-6	79-16-3	2012/12/19
111	Bis(pentabromophenyl) ether (decabromodiphenyl ether;	214-604-9	1163-19-5	2012/12/19
112	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	2012/12/19
113	Acetic acid, lead salt, basic	257-175-3	51404-69-4	2012/12/19
114	Lead titanium trioxide	235-038-9	12060-00-3	2012/12/19
115	Lead oxide sulfate	234-853-7	12036-76-9	2012/12/19
116	Dimethyl sulphate	201-058-1	77-78-1	2012/12/19
117	Diethyl sulphate	200-589-6	64-67-5	2012/12/19
118	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	2012/12/19
119	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 c	-	-	2012/12/19
120	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	2012/12/19
121	N,N-dimethylformamide	200-679-5	68-12-2	2012/12/19
122	Furan	203-727-3	110-00-9	2012/12/19
123	Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	2012/12/19
124	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compound	272-271-5	68784-75-8	2012/12/19
125	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	2012/12/19
126	o-Toluidine	202-429-0	95-53-4	2012/12/19
127	Lead monoxide (lead oxide)	215-267-0	1317-36-8	2012/12/19
128	Lead titanium zirconium oxide	235-727-4	12626-81-2	2012/12/19
129	4-Aminoazobenzene	200-453-6	60-90-3	2012/12/19
130	Silicic acid, lead salt	234-363-3	11120-22-2	2012/12/19
131	Lead dinitrate	233-245-9	10099-74-8	2012/12/19
132	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	2012/12/19
133	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	2012/12/19

134	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isom	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3	2012/12/19
135	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans-stereo isomeric f	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	2012/12/19
136	Henicosfluoroundecanoic acid	218-165-4	2058-94-8	2012/12/19
137	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	2012/12/19
138	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	2012/12/19
139	Cadmium	231-152-8	7440-43-9	2013/6/20
140	Cadmium oxide	215-146-2	1306-19-0	2013/6/20
141	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	2013/6/20
142	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	2013/6/20
143	Dipentyl phthalate (DPP)	205-017-9	131-18-0	2013/6/20
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, whic	-	-	2013/6/20
145	Cadmium sulphide	215-147-8	1306-23-6	2013/12/16
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	2013/12/16
147	Dihexyl phthalate	201-559-5	84-75-3	2013/12/16
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	2013/12/16
149	Trixylyl phosphate	246-677-8	25155-23-1	2013/12/16
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	2013/12/16
151	Lead di(acetate)	206-104-4	301-04-2	2013/12/16
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	2014/6/16
153	Cadmium chloride	233-296-7	10108-64-2	2014/6/16
154	Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-	2014/6/16
155	Sodium peroxometaborate	231-556-4	7632-04-4	2014/6/16

**Remark:**

The information being provided comes from reviewing raw materials information provided by supplier, PFC may not have conducted any tests to determine the actual presence of these substances in products.

**PFC Device Corporation**

**QRA Director: Hank Huang**

**Date : 2014/6/20**

**Version: 09**

