

## REACH 223 SVHC CERTIFICATE OF COMPLIANCE

**Company:** Suntsu Electronics, Inc.  
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This letter is to assure that **All Suntsu Electronics, Inc.'s** parts do not contain any SVHC 223 (Substances of Very High Concern) greater than 1000ppm in any articles without exemption, as specified in the table below according to the Candidate list published by ECHA (European Chemical Agency) and REACH Restricted Substance(REACH Annex XVII).

#	Substance name	CAS No.	SVHC Published Date
1	Anthracene	120-12-7	10/28/08
2	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	10/28/08
3	Dibutyl phthalate (DBP)	84-74-2	10/28/08
4	Cobalt dichloride	7646-79-9	10/28/08
5	Diarsenic pentaoxide	1303-28-2	10/28/08
6	Diarsenic trioxide	1327-53-3	10/28/08
7	Sodium dichromate	10588-01-9, 7789-12-0	10/28/08
8	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	10/28/08
9	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	10/28/08
10	Hexabromocyclododecane (HBCDD)	3194-55-6	10/28/08
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	10/28/08
12	Bis(tributyltin) oxide (TBTO)	56-35-9	10/28/08
13	Lead hydrogen arsenate	7784-40-9	10/28/08
14	Triethyl arsenate	15606-95-8	10/28/08
15	Benzyl butyl phthalate (BBP)	85-68-7	10/28/08
16	2,4-dinitrotoluene	121-14-2	01/13/10
17	Anthracene oil	90640-80-5	01/13/10
18	Anthracene oil, anthracene paste	90640-81-6	01/13/10
19	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	01/13/10
20	Anthracene oil, anthracene paste, distn. lights	91995-17-4	01/13/10
21	Anthracene oil, anthracene-low	90640-82-7	01/13/10
22	Diisobutyl phthalate	84-69-5	01/13/10
23	Lead chromate	7758-97-6	01/13/10
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	01/13/10
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	01/13/10
26	Pitch, coal tar, high-temp.	65996-93-2	01/13/10
27	Tris(2-chloroethyl) phosphate	115-96-8	01/13/10
28	Acrylamide	79-06-1	03/30/10
29	Trichloroethylene	79-01-6	06/18/10
30	Boric acid	10043-35-3	06/18/10
31	Disodium tetraborate, anhydrous	12179-04-3, 1303-96-4, 1330-43-4	06/18/10
32	Tetraboron disodium heptaoxide, hydrate	12267-73-1	06/18/10
33	Sodium chromate	7775-11-3	06/18/10
34	Potassium chromate	7789-00-6	06/18/10
35	Ammonium dichromate	7789-09-5	06/18/10
36	Potassium dichromate	7778-50-9	06/18/10
37	2-ethoxyethanol	110-80-5	12/15/10
38	2-methoxyethanol	109-86-4	12/15/10
39	Oligomers of chromic acid and dichromic acid	7738-94-5, 13530-68-2	12/15/10
40	Chromium trioxide	1333-82-0	12/15/10

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41	Cobalt(II) carbonate	513-79-1	12/15/10
42	Cobalt(II) diacetate	71-48-7	12/15/10
43	Cobalt(II) dinitrate	10141-05-6	12/15/10
44	Cobalt(II) sulphate	10124-43-3	12/15/10
45	1,2,3-trichloropropane	96-18-4	06/20/11
46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	06/20/11
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	06/20/11
48	1-Methyl-2-pyrrolidone (NMP)	872-50-4	06/20/11
49	2-ethoxyethyl acetate	111-15-9	06/20/11
50	Hydrazine	302-01-2, 7803-57-8	06/20/11
51	Strontium chromate	7789-06-2	06/20/11
52	Dichromium tris(chromate)	24613-89-6	12/19/11
53	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	12/19/11
54	Pentazinc chromate octahydroxide	49663-84-5	12/19/11
55	Aluminosilicate Refractory Ceramic Fibres	-	12/19/11
56	Zirconia Aluminosilicate Refractory Ceramic Fibres	-	12/19/11
57	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	12/19/11
58	Bis(2-methoxyethyl) phthalate	117-82-8	12/19/11
59	2-Methoxyaniline, o-Anisidine	90-04-0	12/19/11
60	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	12/19/11
61	1,2-dichloroethane	107-06-2	12/19/11
62	Bis(2-methoxyethyl) ether	111-96-6	12/19/11
63	Arsenic acid	7778-39-4	12/19/11
64	Calcium arsenate	7778-44-1	12/19/11
65	Trilead diarsenate	3687-31-8	12/19/11
66	N,N-dimethylacetamide	127-19-5	12/19/11
67	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	12/19/11
68	Phenolphthalein	77-09-8	12/19/11
69	Lead diazide, Lead azide	13424-46-9	12/19/11
70	Lead styphnate	15245-44-0	12/19/11
71	Lead dipicrate	6477-64-1	12/19/11
72	$\alpha,\alpha$ -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	06/18/12
73	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	06/18/12
74	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione ( $\beta$ -TGIC)	59653-74-6	06/18/12
75	Diboron trioxide	1303-86-2	06/18/12
76	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	06/18/12
77	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	06/18/12
78	Lead(II) bis(methanesulfonate)	17570-76-2	06/18/12
79	Formamide	75-12-7	06/18/12
80	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	06/18/12
81	1, 2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	06/18/12
82	[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	06/18/12
83	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	06/18/12
84	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	06/18/12
85	Pyrochlore, antimony lead yellow	8012-00-8	12/19/12
86	6-methoxy-m-toluidine (p-cresidine)	120-71-8	12/19/12
87	Henicosafuoroundecanoic acid	2058-94-8	12/19/12
88	1) Hexahydro-1-methylphthalic anhydride, 2) Hexahydro-3-methylphthalic anhydride, 3)Hexahydro-4-methylphthalic anhydride, 4) Hexahydromethylphthalic anhydride	48122-14-1, 57110-29-9, 19438-60-9 & 25550-51-0	12/19/12
89	1) Trans-cyclohexane-1,2-dicarboxylic anhydride, 2) Cyclohexane-1,2-dicarboxylic anhydride, 3) cis-cyclohexane-1,2-dicarboxylic anhydride	14166-21-3, 85-42-7, 13149-00-3	12/19/12
90	Dibutyltin dichloride (DBTC)	683-18-1	12/19/12
91	Lead bis(tetrafluoroborate)	13814-96-5	12/19/12
92	Lead dinitrate	10099-74-8	12/19/12
93	Silicic acid, lead salt	11120-22-2	12/19/12
94	4-aminoazobenzene	60-09-3	12/19/12
95	Lead titanium zirconium oxide	12626-81-2	12/19/12
96	Lead monoxide (lead oxide)	1317-36-8	12/19/12
97	o-toluidine	95-53-4	12/19/12

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98	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	12/19/12
99	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8	12/19/12
100	Trilead bis(carbonate) dihydroxide	1319-46-6	12/19/12
101	Furan	110-00-9	12/19/12
102	N,N-dimethylformamide	68-12-2	12/19/12
104	4-Nonylphenol, branched and linear	-	12/19/12
105	4,4'-methylenedi-o-toluidine	838-88-0	12/19/12
106	Diethyl sulphate	64-67-5	12/19/12
107	Dimethyl sulphate	77-78-1	12/19/12
108	Lead oxide sulfate	12036-76-9	12/19/12
109	Lead titanium trioxide	12060-00-3	12/19/12
110	Acetic acid, lead salt, basic	51404-69-4	12/19/12
111	[Phthalato(2-)]dioxotrilead	69011-06-9	12/19/12
112	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	1163-19-5	12/19/12
113	N-methylacetamide	79-16-3	12/19/12
114	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	12/19/12
115	1,2-diethoxyethane	629-14-1	12/19/12
116	Tetralead trioxide sulphate	12202-17-4	12/19/12
117	N-pentyl-isopentylphthalate	-	12/19/12
118	Dioxobis(stearato)trilead	12578-12-0	12/19/12
119	Tetraethyllead	78-00-2	12/19/12
120	Pentalead tetraoxide sulphate	12065-90-6	12/19/12
121	Pentacosafuorotridecanoic acid	72629-94-8	12/19/12
122	Tricosafuorododecanoic acid	307-55-1	12/19/12
123	Heptacosafuorotetradecanoic acid	376-06-7	12/19/12
124	1-bromopropane (n-propyl bromide)	106-94-5	12/19/12
125	Methoxyacetic acid	625-45-6	12/19/12
126	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	12/19/12
127	Methyloxirane (Propylene oxide)	75-56-9	12/19/12
128	Trilead dioxide phosphonate	12141-20-7	12/19/12
129	o-aminoazotoluene	97-56-3	12/19/12
130	1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	84777-06-0	12/19/12
131	4,4'-oxydianiline and its salts	101-80-4	12/19/12
132	Orange lead (lead tetroxide)	1314-41-6	12/19/12
133	Biphenyl-4-ylamine	92-67-1	12/19/12
134	Diisopentyl phthalate	605-50-5	12/19/12
135	Fatty acids, C16-18, lead salts	91031-62-8	12/19/12
136	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)	123-77-3	12/19/12
137	Sulfurous acid, lead salt, dibasic	62229-08-7	12/19/12
138	Lead cyanamidate	20837-86-9	12/19/12
139	Cadmium	7440-43-9	06/20/13
140	Cadmium oxide	1306-19-0	06/20/13
141	Dipentyl phthalate (DPP)	131-18-0	06/20/13
142	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]	127087-87-0, 37205-87-1, 1119449-37-4, 1119449-38-5, 27942-27-4, 7311-27-5, 9016-45-9, 26027-38-3, 68412-54-4, 20427-84-3 & 14409-72-4	06/20/13
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	06/20/13
144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	06/20/13
145	Cadmium sulphide	1306-23-6	12/16/13
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)	1937-37-7	12/16/13
147	Dihexyl phthalate	84-75-3	12/16/13
148	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	12/16/13
149	Trixylyl phosphate	25155-23-1	12/16/13
150	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	12/16/13
151	Lead di(acetate)	301-04-2	12/16/13
152	Cadmium chloride	10108-64-2	06/16/14
153	Sodium peroxometaborate	7632-04-4	06/16/14
154	Sodium perborate, perboric acid, sodium salt	15120-21-5, 11138-47-9	06/16/14
155	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	06/16/14

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156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	12/17/14
157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	12/17/14
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	12/17/14
159	Cadmium fluoride	7790-79-6	12/17/14
160	Cadmium sulphate	10124-36-4, 31119-53-6	12/17/14
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)	-	12/17/14
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	68515-51-5, 68648-93-1	06/15/15
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]	117933-89-8	06/15/15
164	Perfluorononan-1-oic-acid and its sodium and ammonium salts	4149-60-4, 21049-39-8, 375-95-1	12/17/15
165	Nitrobenzene	98-95-3	12/17/15
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	12/17/15
167	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	12/17/15
168	1,3-propanesultone	1120-71-4	12/17/15
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	06/20/16
170	4,4'-isopropylidenediphenol	80-05-7	01/12/17
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2	01/12/17
172	4-heptylphenol, branched and linear	-	01/12/17
173	p-(1,1-dimethylpropyl)phenol	80-46-6	01/12/17
174	Perfluorohexane-1-sulphonic acid and its salts	-	07/07/17
175	Benzo[a]anthracene	56-55-3	01/15/18
176	Cadmium carbonate	513-78-0	01/15/18
177	Cadmium hydroxide	21041-95-2	01/15/18
178	Cadmium nitrate	10325-94-7	01/15/18
179	Chrysene	218-01-9	01/15/18
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	-	01/15/18
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	01/15/18
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	552-30-7	06/27/18
183	Benzo[ghi]perylene	191-24-2	06/27/18
184	Decamethylcyclopentasiloxane	541-02-6	06/27/18
185	Dicyclohexyl phthalate	84-61-7	06/27/18
186	Disodium octaborate	12008-41-2	06/27/18
187	Dodecamethylcyclohexasiloxane	540-97-6	06/27/18
188	Ethylenediamine	107-15-3	06/27/18
189	Lead	7439-92-1	06/27/18
190	Octamethylcyclotetrasiloxane	556-67-2	06/27/18
191	Terphenyl, hydrogenated	61788-32-7	06/27/18
192	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	01/15/19
193	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	01/15/19
194	Benzo[k]fluoranthene	207-08-9	01/15/19
195	Fluoranthene	206-44-0	01/15/19
196	Phenanthrene	85-01-8	01/15/19
197	Pyrene	129-00-0	01/15/19
198	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	07/16/19
199	4-tert-butylphenol	98-54-4	07/16/19
200	2-methoxyethyl acetate	110-49-6	07/16/19
201	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	-	07/16/19
202	Diisohexyl phthalate	71850-09-4	01/16/20
203	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	01/16/20
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	01/16/20
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	01/16/20
206	Dibutylbis(pentane-2,4-dionato-0,0') tin	22673-19-4	06/25/20
207	Butyl 4-hydroxybenzoate	94-26-8	06/25/20
208	2-methylimidazoate	693-98-1	06/25/20

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209	1-vinylimidazole	1072-63-5	06/25/20
210	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	01/19/21
211	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	-	01/19/21
212	1,4-dioxane	123-91-1	07/08/21
213	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)	1522-92-5, 36483-57-5, 3296-90-0, 96-13-9	07/08/21
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	75166-31-3, 80-54-6, 75166-30-2	07/08/21
215	4,4'-(1-methylpropylidene)bisphenol	77-40-7	07/08/21
216	glutaral	111-30-8	07/08/21
217	Medium-chain chlorinated paraffins (MCCP)	1372804-76-6, 85535-85-9, 198840-65-2	07/08/21
218	orthoboric acid, sodium salt	25747-83-5, 22454-04-2, 14312-40-4, 1333-73-9, 13840-56-7, 14890-53-0	07/08/21
219	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	210555-94-5, 27459-10-5, 27147-75-7, 121158-58-5, 74499-35-7, 57427-55-1	07/08/21
220	(±)-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)		01/17/22
221	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1	01/17/22
222	S-(tricyclo(5.2.1.0' <sup>2</sup> ,6)deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	01/17/22
223	tris(2-methoxyethoxy)vinylsilane	1067-53-4	01/17/22

Signature: *Branden Gibbons* Date : February 15th, 2022