

**SVHC Candidate List
Identified by the European Chemicals Agency (ECHA)**

Supplier:		Ormet Circuits, Inc.		Product name(s)		Ormet		Product No. or Numbers	222, 400, 700 and 800 series
Check here		If none of the substances listed below are present in products in any concentration.						Signature and date	
Substance Identification					Reason for Proposing	Present in raw material?	If present, concentration	Comments re: SAFE use in an article if >1000 ppm	
SVHC #	Adopted	Substance name	CAS number	EC number					
1	Oct.2008	Anthracene	120-12-7	204-371-1	PBT	No			
2	Oct.2008	4, 4'- Diaminodiphenylmethane	101-77-9	202-974-4	CMR	No			
3	Oct.2008	Dibutyl phthalate	84-74-2	201-557-4	CMR	No			
4	Oct.2008	Cobalt dichloride	7646-79-9	231-589-4	CMR	No			
5	Oct.2008	Diarsenic pentaoxide	1303-28-2	215-116-9	CMR	No			
6	Oct.2008	Diarsenic trioxide	1327-53-3	215-481-4	CMR	No			
7	Oct.2008	Sodium dichromate, dihydrate	7789-12-0	234-190-3	CMR	No			
8	Oct.2008	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	vPvB	No			
9	Oct.2008	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0	CMR	No			
10	Oct.2008	Hexabromocyclododecane (HBCDD)	25637-99-4	247-148-4	PBT	No			
11	Oct.2008	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	PBT	No			
12	Oct.2008	Bis(tributyltin)oxide	56-35-9	200-268-0	PBT	No			
13	Oct.2008	Lead hydrogen arsenate	7784-40-9	232-064-2	CMR	No			
14	Oct.2008	Triethyl arsenate	15606-95-8	427-700-2	CMR	No			
15	Oct.2008	Benzyl butyl phthalate	85-68-7	201-622-7	CMR	No			
16	Jan.2010	2,4-Dinitrotoluene	121-14-2	204-450-0	CMR	No			
17	Jan.2010	Anthracene oil	90640-80-5	292-602-7	PBT, vPvB, CMR	No			
18	Jan.2010	Anthracene oil, anthracene paste, distn. lights	91995-17-4	295-278-5	PBT, vPvB, CMR	No			
19	Jan.2010	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	PBT, vPvB, CMR	No			

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20	Jan.2010	Anthracene oil, anthracene-low	90640-82-7	292-604-8	PBT, vPvB, CMR	No		
21	Jan.2010	Anthracene oil, anthracene paste	90640-81-6	292-603-2	PBT, vPvB, CMR	No		
22	Jan.2010	Diisobutyl phthalate	84-69-5	201-553-2	CMR	No		
23	Jan.2010	Aluminosilicate Refractory Ceramic Fibres as defined by ECHA in press release ECHA/PR/09/15	-	-	CMR	No		
24	Jan.2010	Zirconia Aluminosilicate Refractory Ceramic Fibres as defined by ECHA in press release ECHA/PR/09/15	-	-	CMR	No		
25	Jan.2010	Lead chromate	7758-97-6	231-846-0	CMR	No		
26	Jan.2010	Lead chromate molybdate sulphate red (C.I. Pigment Red)	12656-85-8	235-759-9	CMR	No		
27	Jan.2010	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	215-693-7	CMR	No		
28	Jan.2010	tris(2-chloroethyl)phosphate	115-96-8	204-118-5	CMR	No		
29	Jan.2010	Pitch, coal tar, high temp.	65996-93-2	266-028-2	PBT, vPvB, CMR	No		
30	Mar.2010	Acryamide	79-06-1	201-173-7	CMR	No		
31	Jun.2010	Trichloroethylene	79-01-6	201-167-4	CMR	No		
32	Jun.2010	Boric acid	10043-35-3, 11113-50-1	233-139-2, 234-343-4	CMR	No		
33	Jun.2010	Disodium tetraborate, anhydrous	1330-43-4, 12179-04-3, 1303-96-4	215-540-4	CMR	No		
34	Jun.2010	Tetraboron disodium heptaoxide, hydrate	12267-73-1	235-541-3	CMR	No		
35	Jun.2010	Sodium chromate	7775-11-3	231-889-5	CMR	No		
36	Jun.2010	Potassium chromate	7789-00-6	232-140-5	CMR	No		
37	Jun.2010	Ammonium dichromate	7789-09-5	232-143-1	CMR	No		
38	Jun.2010	Potassium dichromate	7778-50-9	231-906-6	CMR	No		
39	Dec.2010	Cobalt (II) sulphate	10124-43-3	233-334-2	CMR	No		

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40	Dec.2010	Cobalt (II) dinitrate	10141-05-6	233-402-1	CMR	No		
41	Dec.2010	Cobalt (II) carbonate	513-79-1	208-169-4	CMR	No		
42	Dec.2010	Cobalt (II) diacetate	71-48-7	200-755-8	CMR	No		
43	Dec.2010	2 – Methoxyethanol	109-86-4	203-713-7	CMR	No		
44	Dec.2010	2 – Ethoxyethanol	110-80-5	203-804-1	CMR	No		
45	Dec.2010	Chromium trioxide	1333-82-0	215-607-8	CMR	No		
46	Dec.2010	Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid & dichromic acid	7738-94-5, 13530-68-2	231-801-5, 236-881-5	CMR	No		
47	May-11	2-ethoxyethyl acetate	111-15-9	203-839-2	CMR	No		
48	May-11	Strontium chromate	7789-06-2	232-142-6	CMR	No		
49	May-11	1, 2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6	CMR	No		
50	May-11	Hydrazine	7803-57-8, 302-01-2	206-828-1	CMR	No		
51	May-11	1-methyl-2-pyrrolidone	872-50-4	212-486-1	CMR	No		
52	May-11	1, 2, 3-trichloropropane	96-18-4	202-486-1	CMR	No		
53	May-11	1, 2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1	CMR	No		
54	Dec.2011	Dichromium tris(chromate)	24613-89-6	246-356-2	CMR	No		
55	Dec.2011	Potassium hydroxyoctaoxidizincatedichromate	11103-86-9	234-329-8	CMR	No		
56	Dec.2011	Pentazine chromate octahydroxide	49663-84-5	256-418-0	CMR	No		
57	Dec.2011	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	500-036-1	CMR	No		
58	Dec.2011	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	CMR	No		

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59	Dec.2011	2-Methoxyaniline; o-Anisidine	90-04-0	201-963-1	CMR	No		
60	Dec.2011	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	205-426-2	CMR	No		
61	Dec.2011	1,2-Dichloroethane	107-06-2	203-458-1	CMR	No		
62	Dec.2011	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	CMR	No		
63	Dec.2011	Arsenic acid	7778-39-4	231-901-9	CMR	No		
64	Dec.2011	Calcium arsenate	7778-44-1	231-904-5	CMR	No		
65	Dec.2011	Trilead diarsenate	3687-31-8	222-979-5	CMR	No		
66	Dec.2011	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4	CMR	No		
67	Dec.2011	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9	CMR	No		
68	Dec.2011	Phenolphthalein	77-09-8	201-004-7	CMR	No		
69	Dec.2011	Lead azide Lead diazide	13424-46-9	236-542-1	CMR	No		
70	Dec.2011	Lead styphnate	15245-44-0	239-290-0	CMR	No		
71	Dec.2011	Lead dipicrate	6477-64-1	229-335-2	CMR	No		
72	Jun.2012	1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2	203-977-3	CMR	No		
73	Jun.2012	1,2-dimethoxyethane; ethylene glycol dimethyl ether(EGDME)	110-71-4	203-794-9	CMR	No		
74	Jun.2012	Diboron trioxide	1303-86-2	215-125-8	CMR	No		
75	Jun.2012	Formamide	75-12-7	200-842-0	CMR	No		
76	Jun.2012	Lead(II) bis(methanesulfonate)	17570-76-2	401-750-5	CMR	No		
77	Jun.2012	[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	CMR	No		

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78	Jun.2012	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC)	2451-62-9	219-514-3	CMR	No		
79	Jun.2012	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	423-400-0	CMR	No		
80	Jun.2012	4,4'-bis(dimethylamino)benzo phenone (Michler's ketone)	90-94-8	202-027-5	CMR	No		
81	Jun.2012	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2	CMR	No		
82	Jun.2012	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene] dimethyl ammonium chloride	208-953-6	548-62-9	CMR	No		
83	Jun.2012	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	CMR	No		
84	Jun.2012	α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	6786-83-0	229-851-8	CMR	No		
85	Dec.2012	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	214-604-9	PBT, vPvB	No		
86	Dec.2012	Pentacosafuorotridecanoic acid	72629-94-8	276-745-2	vPvB	No		
87	Dec.2012	Tricosafuorododecanoic acid	307-55-1	206-203-2	vPvB	No		
88	Dec.2012	Henicosafuoroundecanoic acid	2058-94-8	218-165-4	vPvB	No		
89	Dec.2012	Heptacosafuorotetradecanoic acid	376-06-7	206-803-4	vPvB	No		
90	Dec.2012	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- isomers [1] are covered by this entry].	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	Equivalent level of concern having probable serious effects to human health(Article 57 f)	No		

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91	Dec.2012	Diazeno-1,2-dicarboxamide (C,C'-azodi (formamide))	123-77-3	204-650-8	Equivalent level of concern having probable serious effects to human health (Article 57 f)	No		
92	Dec.2012	Methoxyacetic acid	625-45-6	210-894-6	CMR	No		
93	Dec.2012	N,N-dimethylformamide	68-12-2	200-679-5	CMR	No		
94	Dec.2012	Dibutyltin dichloride (DBTC)	683-18-1	211-670-0	CMR	No		
95	Dec.2012	Lead monoxide (Lead oxide)	1317-36-8	215-267-0	CMR	No		
96	Dec.2012	Orange lead (Lead tetroxide)	1314-41-6	215-235-6	CMR	No		
97	Dec.2012	Lead bis(tetrafluoroborate)	13814-96-5	237-486-0	CMR	No		
98	Dec.2012	Trilead bis(carbonate)dihydroxide	1319-46-6	215-290-6	CMR	No		
99	Dec.2012	Lead titanium trioxide	12060-00-3	235-038-9	CMR	No		
100	Dec.2012	Lead titanium zirconium oxide	12626-81-2	235-727-4	CMR	No		
101	Dec.2012	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 forms) and all possible	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260,566-1	Equivalent level of concern having probable serious effects to human health (Article 57 f)	No		
102	Dec.2012	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]	-	-	Equivalent level of concern having probable serious effects to the environment (Article 57f)	No		
103	Dec.2012	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	Equivalent level of concern having probable serious effects to the environment (Article 57f)	No		
104	Dec.2012	Silicic acid, lead salt	11120-22-2	234-363-3	CMR	No		
105	Dec.2012	1-bromopropane (n-propyl bromide)	106-94-5	203-445-0	CMR	No		

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106	Dec.2012	Methyloxirane (Propylene oxide)	75-56-9	200-879-2	CMR	No		
107	Dec.2012	1,2-Benzenedicarboxylic acid, dipentylester, branched & linear	84777-06-0	284-032-2	CMR	No		
108	Dec.2012	Diisopentylphthalate (DIPP)	605-50-5	210-088-4	CMR	No		
109	Dec.2012	N-pentyl-isopentylphthalate	776297-69-9	-	CMR	No		
110	Dec.2012	1,2-diethoxyethane	629-14-1	211-076-1	CMR	No		
111	Dec.2012	Acetic acid, lead salt, basic	51404-69-4	257-853-7	CMR	No		
112	Dec.2012	Lead oxide sulfate	12036-76-9	234-853-7	CMR	No		
113	Dec.2012	[Phthalato(2-)]dioxotrilead	69011-06-9	273-688-5	CMR	No		
114	Dec.2012	Dioxobis(stearato)trilead	12578-12-0	235-702-8	CMR	No		
115	Dec.2012	Fatty acids, C16-18, lead salts	91031-62-8	292-966-7	CMR	No		
116	Dec.2012	Lead cyanidate	20837-86-9	244-073-9	CMR	No		
117	Dec.2012	Lead dinitrate	10099-74-8	233-245-9	CMR	No		
118	Dec.2012	Pentalead tetraoxide sulphate	12065-90-6	235-067-7	CMR	No		
119	Dec.2012	Pyrochlore, antimony lead yellow	8012-00-8	232-382-1	CMR	No		
120	Dec.2012	Silicic acid (H ₂ Si ₂ O ₅), 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 compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	68784-75-8	272-271-5	CMR	No		
121	Dec.2012	Sulfurous acid, lead salt, dibasic	62229-08-7	263-467-1	CMR	No		
122	Dec.2012	Tetraethyllead	78-00-2	201-075-4	CMR	No		
123	Dec.2012	Tetralead trioxide sulphate	12202-17-4	235-380-9	CMR	No		
124	Dec.2012	Trilead dioxide phosphonate	12141-20-7	235-252-2	CMR	No		
125	Dec.2012	Furan	110-00-9	203-727-3	CMR	No		
126	Dec.2012	Diethyl sulphate	64-67-5	200-589-6	CMR	No		

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127	Dec.2012	Dimethyl sulphate	77-78-1	201-058-1	CMR	No		
128	Dec.2012	3-ethyl-2-methyl-2-(3-methyl butyl)-1,3-oxazolidine	143860-04-2	421-150-7	CMR	No		
129	Dec.2012	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	201-861-7	CMR	No		
130	Dec.2012	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	CMR	No		
131	Dec.2012	4,4'-oxydianiline and its salts	101-80-4	202-977-0	CMR	No		
132	Dec.2012	4-aminoazobenzene	60-09-3	200-453-6	CMR	No		
133	Dec.2012	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	202-453-1	CMR	No		
134	Dec.2012	6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1	CMR	No		
135	Dec.2012	Biphenyl-4-ylamine	92-67-1	202-177-1	CMR	No		
136	Dec.2012	o-aminoazotoluene [(4-o-tolylazo-toluidine)]	97-56-3	202-591-2	CMR	No		
137	Dec.2012	o-toluidine	95-53-4	202-429-0	CMR	No		
138	Dec.2012	N-methylacetamide	79-16-3	201-182-6	CMR	No		
139	Jun.2013	cadmium	7440-43-9	231-152-8	CMR	No		
140	Jun.2013	cadmium oxide	1306-19-0	215-146-2	CMR	No		
141	Jun.2013	Dipentyl phthalate	131-18-0	205-017-9	CMR	No		
142	Jun.2013	Ammonium pentadecafluorooctanate (APFO)	3825-26-1	223-320-4	CMR	No		
143	Jun.2013	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	CMR	No		
144	Dec.2013	Cadmium sulphide	1306-23-6	215-147-8	CMR	No		
145	Jun.2013	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] linear. ethoxylated [substances with a	-	-	CMR	No		

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146	Dec.2013	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	209-358-4	CMR	No		
147	Dec.2013	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	217-710-3	CMR	No		
148	Dec.2013	Dihexyl phthalate	84-75-3	201-559-5	CMR	No		
149	Dec.2013	Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	202-506-9	CMR	No		
150	Dec.2013	Lead di(acetate)	301-04-2	206-104-4	CMR	No		
151	Dec.2013	Trixylyl phosphate	25155-23-1	246-677-8	CMR	No		
152	June 2014	Cadmium chloride	10108-64-2	233-296-7	CMR	No		
153	June 2014	1, 2-Benzenedicarboxylic acid, dihexyl ester, branched & linear	68515-50-4	271-093-5	CMR	No		
154	June 2014	Sodium peroxometaborate	7632-04-4	231-556-4	CMR	No		
155	June 2014	Sodium perborate; perboric acid, sodium salt	-	239-172-9, 234-390-0	CMR	No		
Other non-ECHA Identified Substances								
Certifier's Signature:						Title:		Senior Scientist
Printed Name:			Catherine Shearer			E-mail:		catherine.shearer@ormetcircuits.net
Phone:			858.831.0010			Date:		2-Sep-14