

REACH SVHC CoC for Crystals/Oscillators

Dec 26, 2011

Dear Customer:

We hereby represent and warrant our products and components will be surveyed in accordance to the list of candidate substance of very high concern (SVHC) of REACH regulation (EC 1907/2006) (<http://echa.europa.eu/web/guest/candidate-list-table>), and fully in compliance with the candidate list substances as below.:

Item	SVHCs of Interest	CAS No.	EC No.
1	Anthracene	120-12-7	204-371-1
2	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	202-974-4
3	Dibutyl phthalate (DBP)	84-74-2	201-557-4
4	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7
5	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	204-211-0
6	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4
7	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	247-148-4 and 221-695-9
8	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5
9	Bis(tributyltin)oxide (TBTO)	56-35-9	200-268-0
10	Cobalt dichloride	7646-79-9	231-589-4
11	Diarsenic pentaoxide	1303-28-2	215-116-9
12	Diarsenic trioxide	1327-53-3	215-481-4
13	Triethyl arsenate	15606-95-8	427-700-2
14	Lead hydrogen arsenate	7784-40-9	232-064-2
15	Sodium dichromate	7789-12-0, 10588-01-9	234-190-3

Item	SVHCs of Interest	CAS No.	EC No.
16	Anthracene oil	90640-80-5	292-602-7
17	Anthracene oil, anthracene paste, distn. lights	91995-17-4	295-278-5
18	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9
19	Anthracene oil, anthracene-low	90640-82-7	292-604-8
20	Anthracene oil, anthracene paste	90640-81-6	292-603-2
21	Pitch, coal tar, high temp.	65996-93-2	266-028-2
22	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the two following conditions: a) Al ₂ O ₃ and SiO ₂ are present within the following concentration ranges: Al ₂ O ₃ : 43.5 – 47 % w/w, and SiO ₂ : 49.5 – 53.5 % w/w, or Al ₂ O ₃ : 45.5 – 50.5 % w/w, and SiO ₂ : 48.5 – 54 % w/w, b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm).	Extracted from Index no. 650-017-00-8	-
23	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the two following conditions: a) Al ₂ O ₃ , SiO ₂ and ZrO ₂ are present within the following concentration ranges: Al ₂ O ₃ : 35 – 36 % w/w, and SiO ₂ : 47.5 – 50 % w/w, and ZrO ₂ : 15 - 17 % w/w, b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm).	Extracted from Index no. 650-017-00-8	-
24	Diisobutyl phthalate (DIBP)	84-69-5	201-553-2
25	2,4-Dinitrotoluene	121-14-2	204-450-0
26	Tris(2-chloroethyl)phosphate	115-96-8	204-118-5
27	Lead chromate	7758-97-6	231-846-0
28	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	235-759-9
29	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	215-693-7
30	Acrylamide	79-06-1	201-173-7

Item	SVHCs of Interest	CAS No.	EC No.
31	Sodium chromate	7775-11-3	231-889-5
32	Ammonium dichromate	7789-09-5	232-143-1
33	Potassium dichromate	7778-50-9	231-906-6
34	Potassium chromate	7789-00-6	232-140-5
35	Boric acid	10043-35-3; 11113-50-1	234-343-4; 233-139-2
36	Disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	215-540-4
37	Tetraboron disodium heptaoxide, hydrate	12267-73-1	235-541-3
38	Trichloroethylene	79-01-6	201-167-4
39	Cobalt(II) sulphate	10124-43-3	233-334-2
40	Cobalt(II) dinitrate	10141-05-6	233-402-1
41	Cobalt(II) carbonate	513-79-1	208-169-4
42	Cobalt(II) diacetate	71-48-7	200-755-8
43	2-Methoxyethanol	109-86-4	203-713-7
44	2-Ethoxyethanol	110-80-5	203-804-1
45	Chromium trioxide	1333-82-0	215-607-8
46	Acids generated from chromium trioxide and their oligomers. Group containing: Chromic acid, Dichromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	7738-94-5, 13530-68-2	231-801-5, 236-881-5
47	2-Ethoxyethyl acetate	111-15-9	203-839-2
48	Strontium chromate	7789-06-2	232-142-6
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6

Item	SVHCs of Interest	CAS No.	EC No.
50	Hydrazine	7803-57-8; 302-01-2	206-114-9
51	1-methyl-2-pyrrolidone	872-50-4	212-828-1
52	1,2,3-trichloropropane	96-18-4	202-486-1
53	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1
54	Dichromium tris(chromate)	24613-89-6	246-356-2
55	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	234-329-8
56	Pentazinc chromate octahydroxide	49663-84-5	256-418-0
57	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	500-036-1
58	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6
59	2-Methoxyaniline; o-Anisidine	90-04-0	201-963-1
60	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	205-426-2
61	1,2-Dichloroethane	107-06-2	203-458-1
62	Bis(2-methoxyethyl) ether	111-96-6	203-924-4
63	Arsenic acid	7778-39-4	231-901-9
64	Calcium arsenate	7778-44-1	231-904-5
65	Trilead diarsenate	3687-31-8	222-979-5
66	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4
67	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	202-918-9
68	Phenolphthalein	77-09-8	201-004-7
69	Lead diazide, Lead azide	13424-46-9	236-542-1
70	Lead styphnate	15245-44-0	239-290-0

Item	SVHCs of Interest	CAS No.	EC No.
71	Lead dipicrate	6477-64-1	229-335-2
72	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 packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm) c) alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less or equal to 18% by weight	--	--
73	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 and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm). c) alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less or equal to 18% by weight	--	--

Applicable Product List:

Type	Series	Type	Series	Type	Series
SMD SEAM OSCILLATOR	FA	SMD SEAM CRYSTAL	FE	XTAL 49U	GA
	FD		FF	XTAL 49S, 49SS	GB
	FJ		FG	XTAL 49SMD	GG
	FK		FH		GC
	FM		FL		GF
	FN		FP	UM1(HC-45/U) XTAL	GJ
	FR		FS	DIP CXO HALF	GN
	FT		FW	SMD TUNING FORK XTAL	F1
	FU		FX	DIP TUNING FORK XTAL	F2
	JX52		FY	SMD FR4 CXO PECL 14*9	F3
	JX71		US		PA
	JX72		SMD GLASS CRYSTAL	F4	
	KD			F5	
	KK			F6	
	KN	F7			
	LD	F8			
	MD	F9			
	MN	FB			
	MP	FC			
	MK	FQ			
	PD	KHz Cylinder XTAL		G1	
	PX		G2		
	TN		G3		
	UJ	KHz SMD XTAL	G4		
	UK		G5		
	YK		G7		
	WX51		G8		
	WX52				
	WX71				

The undersigned is an authorized representative of the PSE Technology Corporation.

Rock Chang 12/27 2011

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