



**REACH Certificate of Compliance**  
(181 substances— Jan 15, 2018)

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To the best of Exar’s knowledge and based upon information received from their suppliers, Exar does not use any Substances of Very High Concern (SVHC) listed under REACH requirements in below listed product(s) or in their manufacturing processes.<sup>1</sup> Table A is a list of these substances.

EXAR Product Number	
XR33193ESB	XR33193ESBTR

March 26, 2018  
QA Manager

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**Table A: List of REACH-SVHC**

	Date of Inclusion: Jan 15, 2018	EC Number		
181	Benz[a]anthracene	200-280-6	157	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)
180	Cadmium carbonate	208-168-9	156	Cadmium sulphate
179	Cadmium hydroxide	244-168-5		<b>Date of Inclusion: June 16, 2014</b>
178	Cadmium nitrate	233-710-6	155	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear
177	Chrysene	205-923-4	154	Sodium perborate; perboric acid, sodium salt
176	Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus" <sup>™</sup> )	-	153	Sodium peroxometaborate
175	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	152	Cadmium chloride
	<b>Date of Inclusion: July 07, 2017</b>	EC Number		<b>Date of Inclusion: December 16, 2013</b>
174	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	206-587-1	151	Cadmium sulphide
	<b>Date of Inclusion: December 19, 2016</b>	EC Number	150	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)
173	4-tert-pentylphenol (PTAP)	201-280-9	149	Dihexyl phthalate
172	4-heptylphenol, branched and linear (4-HPbl)	-	148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)
171	Nonadecafluorodecanoic acid (PGDA) and its sodium	206-400-3	147	Trixylyl phosphate
170	4,4'-isopropylidenediphenol (bisphenol A)	201-245-8	146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)
	<b>Date of Inclusion: June 20, 2016</b>	EC Number	145	Lead di(acetate)
169	Benzo[def]chrysene(Benzo[a]pyrene)	200-028-5		<b>Date of Inclusion: June 20, 2013</b>
	<b>Date of Inclusion: December 17, 2015</b>	EC Number	144	Cadmium
168	1,3-propanesultone	214-317-9	143	Ammonium pentadecafluorooctanoate (APFO)
167	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol	223-383-8	142	Pentadecafluorooctanoic acid (PFOA)
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol	253-037-1	141	Dipentyl phthalate (DPP)
165	Nitrobenzene	202-716-0	140	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]
164	Perfluorononan-1-oic-acid and its sodium and ammonium salts	-	139	Cadmium oxide
	<b>Date of Inclusion: June 15, 2015</b>	EC Number		<b>Date of Inclusion: December 19, 2012</b>
163	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	138	Trilead dioxide phosphonate
162	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]	-	137	Trilead bis(carbonate)dihydroxide
	<b>Date of Inclusion: December 17, 2014</b>	EC Number	136	Tricosafuorododecanoic acid
161	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	135	Tetralead trioxide sulphate
160	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	134	Tetraethyllead
159	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	133	Sulfurous acid, lead salt, dibasic
158	Cadmium fluoride	232-222-0	132	Silicic acid, lead salt



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131	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 compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	272-271-5	97	Acetic acid, lead salt, basic	257-175-3
130	Pyrochlore, antimony lead yellow	232-382-1	96	[Phthalato(2-)]dioxotrilead	273-688-5
129	Pentalead tetraoxide sulphate	235-067-7	95	6-methoxy-m-toluidine (p-cresidine)	204-419-1
128	Pentacosafuorotridecanoic acid	276-745-2	94	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]	-
127	Orange lead (lead tetroxide)	215-235-6	93	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1
126	o-Toluidine	202-429-0	92	4-Aminoazobenzene	200-453-6
125	o-aminoazotoluene	202-591-2	91	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-
124	N-pentyl-isopentylphthalate	-	90	4,4'-oxydianiline and its salts	202-977-0
123	N-methylacetamide	201-182-6	89	4,4'-methylenedi-o-toluidine	212-658-8
122	N,N-dimethylformamide	200-679-5	88	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7
121	Methyloxirane (Propylene oxide)	200-879-2	87	1-bromopropane (n-propyl bromide)	203-445-0
120	Methoxyacetic acid	210-894-6	86	1,2-Diethoxyethane	211-076-1
119	Lead titanium zirconium oxide	235-727-4	85	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2
118	Lead titanium trioxide	235-038-9	<b>Date of Inclusion: June 18, 2012</b>		
117	Lead oxide sulfate	234-853-7	EC Number		
116	Lead monoxide (lead oxide)	215-267-0	84	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)]	229-851-8
115	Lead dinitrate	233-245-9	83	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2
114	Lead cyanamidate	244-073-9	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
113	Lead bis(tetrafluoroborate)	237-486-0	81	Diboron trioxide	215-125-8
112	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 combinations of the isomers [1] are covered by this entry]	247-094-1, 243-072-0, 256-356-4, 260-566-1	80	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3
111	Heptacosafuorotetradecanoic acid	206-803-4	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
110	Henicosafuoroundecanoic acid	218-165-4	78	Lead(II) bis(methanesulfonate)	401-750-5
109	Furan	203-727-3	77	Formamide	200-842-0
108	Fatty acids, C16-18, lead salts	292-966-7	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
107	Dioxobis(stearato)trilead	235-702-8	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9
106	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	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	219-943-6
105	Dimethyl sulphate	201-058-1			
104	Diisopentylphthalate	210-088-4			
103	Diethyl sulphate	200-589-6			
102	Dibutyltin dichloride (DBTC)	211-670-0			
101	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8			
100	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]	201-604-9, 236-086-3, 238-009-9			
99	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9			
98	Biphenyl-4-ylamine	202-177-1			



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<i>Michler's base (EC No. 202-959-2)</i>		
73	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3
72	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5
	<b>Date of Inclusion: December 19, 2011</b>	<b>EC Number</b>
71	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2
70	N,N-dimethylacetamide	204-826-4
69	Phenolphthalein	201-004-7
68	Lead diazide, Lead azide	236-542-1
67	Lead dipicrate	229-335-2
66	1,2-dichloroethane	203-458-1
65	Calcium arsenate	231-904-5
64	Dichromium tris(chromate)	246-356-2
63	2-Methoxyaniline; o-Anisidine	201-963-1
62	Pentazinc chromate octahydroxide	256-418-0
61	Arsenic acid	231-901-9
60	Potassium hydroxyoctaoxidizincatedichromate	234-329-8
59	Formaldehyde, oligomeric reaction products with aniline	500-036-1
58	Lead styphnate	239-290-0
57	Trilead diarsenate	222-979-5
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 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 (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight	
55	Bis(2-methoxyethyl) phthalate	204-212-6
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 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 (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content less or equal to 18% by weight	
53	Bis(2-methoxyethyl) ether	203-924-4
52	2,2'-dichloro-4,4'-methylenedianiline	202-918-9
51	Cobalt dichloride	231-589-4
	<b>Date of Inclusion: June 20, 2011</b>	<b>EC Number</b>
50	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6
48	Strontium chromate	232-142-6
47	1-Methyl-2-pyrrolidone	212-828-1
46	1,2,3-Trichloropropane	202-486-1
45	2-Ethoxyethyl acetate	203-839-2
44	Hydrazine	206-114-9
	<b>Date of Inclusion: December 15, 2010</b>	<b>EC Number</b>
43	Cobalt(II) diacetate	200-755-8
42	Cobalt(II) sulphate	233-334-2
41	2-Ethoxyethanol	203-804-1
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
39	2-Methoxyethanol	203-713-7
38	Chromium trioxide	215-607-8
37	Cobalt(II) carbonate	208-169-4
36	Cobalt(II) dinitrate	233-402-1
	<b>Date of Inclusion: June 18, 2010</b>	<b>EC Number</b>
35	Trichloroethylene	201-167-4
34	Potassium dichromate	231-906-6
33	Tetraboron disodium heptaoxide, hydrate	235-541-3
32	Ammonium dichromate	232-143-1
31	Boric acid	233-139-2, 234-343-4
30	Sodium chromate	231-889-5
29	Disodium tetraborate, anhydrous	215-540-4
28	Potassium chromate	232-140-5
	<b>Date of Inclusion: March 30, 2010</b>	<b>EC Number</b>
27	Acrylamide	201-173-7



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<b>Date of Inclusion: January 13, 2010</b>		EC Number
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7
25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9
24	Anthracene oil	292-602-7
23	2,4-Dinitrotoluene	204-450-0
22	Anthracene oil, anthracene paste, anthracene fraction	295-275-9
21	Anthracene oil, anthracene-low	292-604-8
20	Tris(2-chloroethyl)phosphate	204-118-5
19	Diisobutyl phthalate	201-553-2
18	Lead chromate	231-846-0
17	Anthracene oil, anthracene paste	292-603-2
16	Pitch, coal tar, high temp.	266-028-2
15	Anthracene oil, anthracene paste, distn. lights	295-278-5
<b>Date of Inclusion: October 28, 2008</b>		EC Number
14	Lead hydrogen arsenate	232-064-2

13	Benzyl butyl phthalate (BBP)	201-622-7
12	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0
11	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4
10	Diarsenic trioxide	215-481-4
9	Bis(tributyltin)oxide (TBTO)	200-268-0
8	Triethyl arsenate	427-700-2
7	Diarsenic pentaoxide	215-116-9
6	Sodium dichromate	234-190-3
5	Dibutyl phthalate (DBP)	201-557-4
4	4,4'- Diaminodiphenylmethane (MDA)	202-974-4
3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5
2	Anthracene	204-371-1
1	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4, 221-695-9