

Certificate of Non-Use of Hazardous Substances

MaxLinear, Inc. certifies that as of the date of this Certificate of Non-Use of Hazardous Substances, the MaxLinear product listed below is certified as follows:

Environmental Category & Description		Details for: XRP431LES5TRR3-F
RoHS Exempt	If "7a", "7c", or "15", then product contains lead but is compliant meeting the requirements of Directive (EU) 2011/65 pursuant to either exemption 7a, 7c, or 15. See Appendix A.	N
RoHS	If "Y", then product is RoHS compliant meeting the requirements of Directive (EU) 2015/863 with no exemptions taken. See Appendix B.	Y
Halogen Free	If "Y", then product is halogen and lead (Pb) free. Green products meet RoHS requirements plus additional hazardous material restrictions. See Appendix C.	Y
REACH	If "Y", then product does not use any Substances of Very High Concern (SVHC) under REACH requirements. See Appendix D for a list of these substances. If "N", please see Appendix E for SVHC that is contained in this product	Y
TSCA	If "Y", then product is compliant and does not use any of the Toxic Substance Control Act (TSCA) restricted substances. See Appendix F for a list of these substances.	Y

MaxLinear, Inc.
Quality and Reliability
May 17, 2024

Appendix A | RoHS with Exemption

Exemption	Description
7a	Lead in high melting temperature type solders
7c	Electrical and electronic components containing lead in a glass or ceramic, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages

Appendix B | RoHS Directive (EU) 2015/863

Restricted Substance	Allowable Limit (at homogenous material level)
Cadmium (Cd)	100 ppm (0.01 weight %)
Mercury (Hg)	1000 ppm (0.10 weight %)
Lead (Pb)	1000 ppm (0.10 weight %)
Hexavalent Chromium (Cr6+)	1000 ppm (0.10 weight %)
Polybrominated biphenyls (PBB)	1000 ppm (0.10 weight %)
Polybrominated diphenyl ethers (PBDE)	1000 ppm (0.10 weight %)
Bis (2-Ethylhexyl) phthalate (DEHP)	1000 ppm (0.10 weight %)
Benzyl butyl phthalate (BBP)	1000 ppm (0.10 weight %)
Dibutyl phthalate (DBP)	1000 ppm (0.10 weight %)
Diisobutyl phthalate (DIBP)	1000 ppm (0.10 weight %)

Appendix C | Halogen Free

Restricted Substance	Allowable Limit
Bromine (Br)	900 ppm
Chlorine (Cl)	900 ppm
Antimony (Sb (Sb ₂ O ₃))	900 ppm

Appendix D | REACH 240 - Regulation (EC) No 1907/2006 (Threshold Limit 1000ppm (0.1% w/w))

	Date of Inclusion: January 23, 2024	EC Number	CAS Number
240	Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	700-960-7	-
239	Bumetizole (UV-326)	223-445-4	3896-11-5
238	2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	438-340-0	119344-86-4
237	2-[2H-benzotriazol-2-yl]-4-[1,1,3,3-tetramethylbutyl]phenol	221-573-5	3147-75-9
236	2,4,6-tri-tert-butylphenol	211-989-5	732-26-3
	Date of Inclusion: June 14, 2023	EC Number	CAS Number
235	diphenyl[2,4,6-trimethylbenzoyl]phosphine oxide	278-355-8	75980-60-8
234	bis(4-chlorophenyl) sulphone	201-247-9	80-07-9
	Date of Inclusion: January 17, 2023	EC Number	CAS Number
233	reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	473-390-7	-
232	Perfluoroheptanoic acid and its salts Ammonium perfluoroheptanoate potassium perfluoroheptanoate Perfluoroheptanoic acid Sodium perfluoroheptanoate	228-098-2 - 206-798-9 243-518-4	6130-43-4 21049-36-5 375-85-9 20109-59-5
231	Melamine	203-615-4	108-78-1
230	Isobutyl 4-hydroxybenzoate	224-208-8	4247-02-3
229	bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	247-426-5	26040-51-7
228	Barium diboron tetraoxide	237-222-4	13701-59-2
227	4,4'-sulphonyldiphenol	201-250-5	80-09-1
226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	201-236-9	79-94-7
225	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	253-692-3	37853-59-1
	Date of Inclusion: June 10, 2022	EC Number	CAS Number
224	N-(hydroxymethyl)acrylamide	213-103-2	924-42-5
	Date of Inclusion: January 17, 2022	EC Number	CAS Number
223	S-(tricyclo[5.2.1.0(2,6)]deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	401-850-9	255881-94-8
222	(±)-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)	-	-
221	tris[2-methoxyethoxy]vinylsilane	213-934-0	1067-53-4
220	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	204-327-1	119-47-1
	Date of Inclusion: July 08, 2021	EC Number	CAS Number
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)	-	-
218	Orthoboric acid, sodium salt	237-560-2	13840-56-7

217	Medium-chain chlorinated paraffins (MCCP) Medium-chain chlorinated paraffins (MCCP) (UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17)	-	-
216	Glutaral	203-856-5	111-30-8
215	4,4'-(1-methylpropylidene)bisphenol	201-025-1	77-40-7
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-	-
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)	221-967-7, 253-057-0, 202-480-9	3296-90-0, 36483-57-5, 1522-92-5, 96-13-9
212	1,4-dioxane	204-661-8	123-91-1
Date of Inclusion: January 19, 2021		EC Number	CAS Number
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	-	-
210	Bis(2-(2-methoxyethoxy)ethyl)ether	205-594-7	143-24-8
Date of Inclusion: June 25, 2020		EC Number	CAS Number
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	245-152-0	22673-19-4
208	Butyl 4-hydroxybenzoate	202-318-7	94-26-8
207	2-methylimidazole	211-765-7	693-98-1
206	1-vinylimidazole	214-012-0	1072-63-5
Date of Inclusion: January 16, 2020		EC Number	CAS Number
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-
204	Diisohexyl phthalate	276-090-2	71850-09-4
203	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	400-600-6	71868-10-5
202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	404-360-3	119313-12-1
Date of Inclusion: July 16, 2019		EC Number	CAS Number
201	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	-	-
200	2-methoxyethyl acetate	203-772-9	110-49-6
199	4-tert-butylphenol	202-679-0	98-54-4
198	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	-
Date of Inclusion: January 15, 2019		EC Number	CAS Number
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	239-139-9	15087-24-8
196	Pyrene	204-927-3	129-00-0
195	Phenanthrene	201-581-5	85-01-8
194	Fluoranthene	205-912-4	206-44-0
193	Benzo[k]fluoranthene	205-916-6	207-08-9
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	6807-17-6
Date of Inclusion: Jun 27, 2018		EC Number	CAS Number
191	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	209-008-0	552-30-7
190	Benzo[ghi]perylene	205-883-8	191-24-2
189	Decamethylcyclopentasiloxane	208-764-9	541-02-6
188	Dicyclohexyl phthalate	201-545-9	84-61-7
187	Disodium octaborate	234-541-0	12008-41-2
186	Dodecamethylcyclotetrasiloxane	234-541-0	540-97-6
185	Ethylenediamine	208-762-8	107-15-3
184	Lead NOTE: Does not exceed threshold levels specified in RoHS Directive (EU) 2015/863	203-468-6	7439-92-1
183	Octamethylcyclotetrasiloxane	231-100-4	556-67-2
182	Terphenyl, hydrogenated	209-136-7	61788-32-7
Date of Inclusion: Jan 15, 2018		EC Number	CAS Number
181	Benz[a]anthracene	200-280-6	56-55-3 1718-53-2
180	Cadmium carbonate	208-168-9	513-78-0
179	Cadmium hydroxide	244-168-5	21041-95-2
178	Cadmium nitrate	233-710-6	10022-68-1 10325-94-7
177	Chrysene	205-923-4	218-01-9 1719-03-5
176	Dodecachloropentacyclo[12.2.1.16.9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™)	-	-
175	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	-
Date of Inclusion: Jul 07, 2017		EC Number	CAS Number
174	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	206-587-1	355-46-4
Date of Inclusion: Dec 19, 2016		EC Number	CAS Number
173	p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6
172	4-heptylphenol, branched and linear	-	-
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	206-400-3 221-470-5	335-76-2 3830-45-3 3108-42-7
170	4,4'-isopropylidenediphenol (bisphenol A)	201-245-8	80-5-7
Date of Inclusion: Jun 20, 2016		EC Number	CAS Number
169	Benzo[def]chrysene(Benzo[a]pyrene)	200-028-5	50-32-8
Date of Inclusion: Dec 17, 2015		EC Number	CAS Number
168	1,3-propanesultone	214-317-9	1120-71-4
167	2,4-di-tert-butyl-6-[5-chlorobenzotriazol-2-yl]phenol (UV-327)	223-383-8	3864-99-1
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3
165	Nitrobenzene	202-716-0	98-95-3
164	Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	4149-60-4 375-95-1 21049-39-8
Date of Inclusion: Jun 15, 2015		EC Number	CAS Number

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)	272-013-1 271-094-0	68648-93-1 68515-51-5
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]	-	-
Date of Inclusion: Dec 17, 2014		EC Number	CAS Number
161	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1
160	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7
159	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1
158	Cadmium fluoride	232-222-0	7790-79-6
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)	-	-
156	Cadmium sulphate	233-331-6	10124-36-4 31119-53-6
Date of Inclusion: Jun 16, 2014		EC Number	CAS Number
155	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4
154	Sodium perborate, perboric acid, sodium salt	234-390-0 239-172-9	11138-47-9 15120-21-5
153	Sodium peroxometaborate	231-556-4	7632-04-4
152	Cadmium chloride	233-296-7	10108-64-2
Date of Inclusion: Dec 16, 2013		EC Number	CAS Number
151	Cadmium sulphide	215-147-8	1306-23-6
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)	217-710-3	1937-37-7
149	Dihexyl phthalate	201-559-5	84-75-3
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7
147	Trixylyl phosphate	246-677-8	25155-23-1
146	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
145	Lead di(acetate)	206-104-4	301-04-2
Date of Inclusion: Jun 20, 2013		EC Number	CAS Number
144	Cadmium	231-152-8	7440-43-9
143	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1
142	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1
141	Dipentyl phthalate (DPP)	205-017-9	131-18-0
140	4-Nonylphenol, branched and linear, ethoxylated	-	-
139	Cadmium oxide	215-146-2	1306-19-0
Date of Inclusion: Dec 19, 2012		EC Number	CAS Number
138	Trilead dioxide phosphonate	235-252-2	12141-20-7
137	Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6
136	Tricosafluorododecanoic acid	206-203-2	307-55-1
135	Tetralead trioxide sulphate	235-380-9	12202-17-4
134	Tetraethyllead	201-075-4	78-00-2
133	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7
132	Silicic acid, lead salt	234-363-3	11120-22-2
131	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped	272-271-5	68784-75-8
130	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8
129	Pentalead tetraoxide sulphate	235-067-7	12065-90-6
128	Pentacosfluorotridecanoic acid	276-745-2	72629-94-8
127	Orange lead (lead tetroxide)	215-235-6	1314-41-6
126	o-Toluidine	202-429-0	95-53-4
125	o-aminoazotoluene	202-591-2	97-56-3
124	N-pentyl-isopentylphthalate	-	776297-69-9
123	N-methylacetamide	201-182-6	79-16-3
122	N,N-dimethylformamide	200-679-5	68-12-2
121	Methyloxirane (Propylene oxide)	200-879-2	75-56-9
120	Methoxyacetic acid	210-894-6	625-45-6
119	Lead titanium zirconium oxide	235-727-4	12626-81-2
118	Lead titanium trioxide	235-038-9	12060-00-3
117	Lead oxide sulfate	234-853-7	12036-76-9
116	Lead monoxide (lead oxide)	215-267-0	1317-36-8
115	Lead dinitrate	233-245-9	10099-74-8
114	Lead cyanamidate	244-073-9	20837-86-9
113	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5
112	Hexahydromethylphthalic anhydride	243-072-0 260-566-1 256-356-4 247-094-1	19438-60-9 57110-29-9 48122-14-1 25550-51-0
111	Heptacosfluorotetradecanoic acid	206-803-4	376-06-7
110	Henicosfluoroundecanoic acid	218-165-4	2058-94-8
109	Furan	203-727-3	110-00-9
108	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8
107	Dioxobis(stearato)trilead	235-702-8	12578-12-0
106	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7
105	Dimethyl sulphate	201-058-1	77-78-1
104	Diisopentylphthalate	210-088-4	605-50-5
103	Diethyl sulphate	200-589-6	64-67-5
102	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1
101	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3
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	13149-00-3 85-42-7 14166-21-3

99	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5
98	Biphenyl-4-ylamine	202-177-1	92-67-1
97	Acetic acid, lead salt, basic	257-175-3	51404-69-4
96	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9
95	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8
94	4-Nonylphenol, branched and linear	-	-
93	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7
92	4-Aminoazobenzene	200-453-6	60-09-3
91	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	-
90	4,4'-oxydianiline and its salts	202-977-0	101-80-4
89	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0
88	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2
87	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5
86	1,2-Diethoxyethane	211-076-1	629-14-1
85	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0
Date of Inclusion: Jun 18, 2012		EC Number	CAS Number
84	α, α -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
83	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1
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
81	Diboron trioxide	215-125-8	1303-86-2
80	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2
79	4,4'-bis(dimethylamino)-4''-(methyldiamino)trityl alcohol [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	209-218-2	561-41-1
78	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2
77	Formamide	200-842-0	75-12-7
76	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	208-953-6	548-62-9
75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4
74	[4-[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	219-943-6	2580-56-5
73	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazine-2,4,6-trione (TGIC)	219-514-3	2451-62-9
72	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8
Date of Inclusion: Dec 19, 2011		EC Number	CAS Number
71	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9
70	N,N-dimethylacetamide	204-826-4	127-19-5
69	Phenolphthalein	201-004-7	77-09-8
68	Lead diazide, Lead azide	236-542-1	13424-46-9
67	Lead dipicrate	229-335-2	6477-64-1
66	1,2-dichloroethane	203-458-1	107-06-2
65	Calcium arsenate	231-904-5	7778-44-1
64	Dichromium tris(chromate)	246-356-2	24613-89-6
63	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0
62	Pentazinc chromate octahydroxide	256-418-0	49663-84-5
61	Arsenic acid	231-901-9	7778-39-4
60	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9
59	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4
58	Lead styphnate	239-290-0	15245-44-0
57	Trilead diarsenate	222-979-5	3687-31-8
56	Zirconia Aluminosilicate Refractory Ceramic Fibres	-	-
55	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
54	Aluminosilicate Refractory Ceramic Fibres	-	-
53	Bis(2-methoxyethyl) ether	203-924-4	111-96-6
52	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4
51	Cobalt dichloride	231-589-4	7646-79-9
Date of Inclusion: Jun 20, 2011		EC Number	CAS Number
50	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4
48	Strontium chromate	232-142-6	7789-06-2
47	1-Methyl-2-pyrrolidone	212-828-1	872-50-4
46	1,2,3-Trichloropropane	202-486-1	96-18-4
45	2-Ethoxyethyl acetate	203-839-2	111-15-9
44	Hydrazine	206-114-9	302-01-2 7803-57-8
Date of Inclusion: Dec 15, 2010		EC Number	CAS Number
43	Cobalt(II) diacetate	200-755-8	71-48-7
42	Cobalt(II) sulphate	233-334-2	10124-43-3
41	2-Ethoxyethanol	203-804-1	110-80-5
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	13530-68-2 7738-94-5
39	2-Methoxyethanol	203-713-7	109-86-4
38	Chromium trioxide	215-607-8	1333-82-0
37	Cobalt(II) carbonate	208-169-4	513-79-1
36	Cobalt(II) dinitrate	233-402-1	10141-05-6
Date of Inclusion: Jun 18, 2010		EC Number	CAS Number
35	Trichloroethylene	201-167-4	79-01-6
34	Potassium dichromate	231-906-6	7778-50-9
33	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
32	Ammonium dichromate	232-143-1	7789-09-5

31	Boric acid	233-139-2 234-343-4	11113-50-1 10043-35-3
30	Sodium chromate	231-889-5	7775-11-3
29	Disodium tetraborate, anhydrous	215-540-4	12179-04-3 1303-96-4 1330-43-4
28	Potassium chromate	232-140-5	7789-00-6
Date of Inclusion: Mar 30, 2010		EC Number	CAS Number
27	Acrylamide	201-173-7	79-06-1
Date of Inclusion: Jan 13, 2010		EC Number	CAS Number
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2
25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8
24	Anthracene oil	292-602-7	90640-80-5
23	2,4-Dinitrotoluene	204-450-0	121-14-2
22	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2
21	Anthracene oil, anthracene-low	292-604-8	90640-82-7
20	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8
19	Diisobutyl phthalate	201-553-2	84-69-5
18	Lead chromate	231-846-0	7758-97-6
17	Anthracene oil, anthracene paste	292-603-2	90640-81-6
16	Pitch, coal tar, high temp.	266-028-2	65996-93-2
15	Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4
Date of Inclusion: Oct 28, 2008		EC Number	CAS Number
14	Lead hydrogen arsenate	232-064-2	7784-40-9
13	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7
12	Bis(2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7
11	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2
10	Diarsenic trioxide	215-481-4	1327-53-3
9	Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9
8	Triethyl arsenate	427-700-2	15606-95-8
7	Diarsenic pentaoxide	215-116-9	1303-28-2
6	Sodium dichromate	234-190-3	10588-01-9 7789-12-0
5	Dibutyl phthalate (DBP)	201-557-4	84-74-2
4	4,4'-Diaminodiphenylmethane (MDA)	202-974-4	101-77-9
3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8
2	Anthracene	204-371-1	120-12-7
1	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4 221-695-9	25637-99-4 134237-52-8 3194-55-6 134237-50-6 134237-51-7

Appendix E | REACH Substance intentionally added (See page 1, Environmental Category & Description, if applicable to this product.)

Restricted Substance	Where used	CAS Number	Threshold Limit
4,4'-Isopropylidenediphenol (Bisphenol A)	Substrate laminate	80-05-7	>0.1% w/w

Appendix F | TSCA

Restricted Substance	CAS Number	Threshold Limit
2,4,6-Tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	>0.3% w/w
Hexachlorobutadiene (HCBD)	87-68-3	>0% w/w
Pentachlorothiophenol (PCTP)	133-49-3	>1% w/w
Decabromodiphenyl ether (DecaBDE)	1163-19-5	>0% w/w
Phenol, isopropylated phosphate (3:1) (PIP 3:1)	68937-41-7	>0% w/w