



REACH Compliance Declaration

Company: Winbond Electronics Corporation

Address: No. 8, Keya 1st Rd., Daya Dist., Taichung City 428, Taiwan, R.O.C.

P/N: Winbond's DRAM & Flash

This letter is to assure that the above-mentioned product(s) made from above-mentioned company is(are) in compliance with the regulation of REACH Substances of Very High Concern (SVHC), as specified in the table below according to the Candidate list published by ECHA (European Chemical Agency).

#	Substance Name	CAS #	SVHC Date of inclusion
1	Anthracene	120-12-7	2008-10-28
2	4,4'- Diaminodiphenylmethane	101-77-9	2008-10-28
3	Dibutyl phthalate	84-74-2	2008-10-28
4	Cobalt dichloride	7646-79-9	2008-10-28
5	Diarsenic pentaoxide	1303-28-2	2008-10-28
6	Diarsenic trioxide	1327-53-3	2008-10-28
7	Sodium dichromate, dihydrate	10588-01-9	2008-10-28
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	2008-10-28
9	Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	2008-10-28
10	Hexabromocyclododecane (HBCDD)	3194-55-6	2008-10-28
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	2008-10-28
12	Bis(tributyltin) oxide,hexabutylstannoxane	56-35-9	2008-10-28
13	Lead hydrogen arsenate	7784-40-9	2008-10-28
14	Triethyl arsenate	15606-95-8	2008-10-28
15	Benzyl butyl phthalate	85-68-7	2008-10-28
16	2,4-Dinitrotoluene	121-14-2	2010-1-13
17	Anthracene oil	90640-80-5	2010-1-13
18	Anthracene oil, anthracene paste	90640-81-6	2010-1-13
19	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	2010-1-13
20	Anthracene oil, anthracene paste, distn. lights	91995-17-4	2010-1-13
21	Anthracene oil, anthracene-low	90640-82-7	2010-1-13
22	Diisobutyl phthalate	84-69-5	2010-1-13
23	Lead chromate	7758-97-6	2010-1-13
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	2010-1-13



25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	2010-1-13
26	Pitch, coal tar, high temp.	65996-93-2	2010-1-13
27	Tris(2-chloroethyl)phosphate	115-96-8	2010-1-13
28	Acrylamide	79-06-1	2010-3-30
29	Trichloroethylene	79-01-6	2010-6-18
30	Boric acid	10043-35-3	2010-6-18
31	Disodium tetraborate, anhydrous	1330-43-4	2010-6-18
32	Tetraboron disodium heptaoxide, hydrate	12267-73-1	2010-6-18
33	Sodium chromate	7775-11-3	2010-6-18
34	Potassium chromate	7789-00-6	2010-6-18
35	Ammonium dichromate	7789-09-5	2010-6-18
36	Potassium dichromate	7778-50-9	2010-6-18
37	2-Ethoxyethanol	110-80-5	2010-12-15
38	2-Methoxyethanol	109-86-4	2010-12-15
39	Chromic acid	7738-94-5	2010-12-15
40	Chromium trioxide	1333-82-0	2010-12-15
41	Cobalt(II) carbonate	513-79-1	2010-12-15
42	Cobalt(II) diacetate	71-48-7	2010-12-15
43	Cobalt(II) dinitrate	10141-05-6	2010-12-15
44	Cobalt(II) sulphate	10124-43-3	2010-12-15
45	1,2,3-Trichloropropane	96-18-4	2011-6-20
46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	2011-6-20
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	2011-6-20
48	1-Methyl-2-pyrrolidone	872-50-4	2011-6-20
49	2-Ethoxyethyl acetate	111-15-9	2011-6-20
50	Hydrazine	302-01-2 / 7803-57-8	2011-6-20
51	Strontium chromate	7789-06-2	2011-6-20
52	Dichromium tris(chromate)	24613-89-6	2011-12-19
53	Potassium hydroxyoctaoxidizincatedi-chromate	11103-86-9	2011-12-19
54	Pentazinc chromate octahydroxide	49663-84-5	2011-12-19
55	Aluminosilicate Refractory Ceramic Fibres (RCF)	-	2011-12-19
56	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)	-	2011-12-19
57	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	2011-12-19
58	Bis(2-methoxyethyl) phthalate	117-82-8	2011-12-19
59	2-Methoxyaniline; o-Anisidine	90-04-0	2011-12-19



60	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	2011-12-19
61	1,2-Dichloroethane	107-06-2	2011-12-19
62	Bis(2-methoxyethyl) ether	111-96-6	2011-12-19
63	Arsenic acid	7778-39-4	2011-12-19
64	Calcium arsenate	7778-44-1	2011-12-19
65	Trilead diarsenate	3687-31-8	2011-12-19
66	N,N-dimethylacetamide (DMAC)	127-19-5	2011-12-19
67	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	2011-12-19
68	Phenolphthalein	77-09-8	2011-12-19
69	Lead azide Lead diazide	13424-46-9	2011-12-19
70	Lead styphnate	15245-44-0	2011-12-19
71	Lead dipicrate	6477-64-1	2011-12-19
72	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	2012-6-18
73	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	2012-6-18
74	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	2012-6-18
75	Diboron trioxide	1303-86-2	2012-6-18
76	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	2012-6-18
77	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)]	561-41-1	2012-6-18
78	Lead(II) bis(methanesulfonate)	17570-76-2	2012-6-18
79	Formamide	75-12-7	2012-6-18
80	[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)]	548-62-9	2012-6-18
81	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	2012-6-18
82	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylenecyclohexa-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)]	2580-56-5	2012-6-18



83	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	2012-6-18
84	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	2012-6-18
85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	2012-12-19
86	Pentacosafuorotridecanoic acid	72629-94-8	2012-12-19
87	Tricosafuorododecanoic acid	307-55-1	2012-12-19
88	Henicosafuoroundecanoic acid	2058-94-8	2012-12-19
89	Heptacosafuorotetradecanoic acid	376-06-7	2012-12-19
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues	-	2012-12-19
91	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	-	2012-12-19
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	2012-12-19
93	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7	2012-12-19
94	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	2012-12-19
95	Methoxy acetic acid	625-45-6	2012-12-19
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	2012-12-19
97	Diisopentylphthalate (DIPP)	605-50-5	2012-12-19
98	N-pentyl-isopentylphthalate	-	2012-12-19
99	1,2-Diethoxyethane	629-14-1	2012-12-19
100	N,N-dimethylformamide; dimethyl formamide	68-12-2	2012-12-19
101	Dibutyltin dichloride (DBT)	683-18-1	2012-12-19
102	Acetic acid, lead salt, basic	51404-69-4	2012-12-19
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)	1319-46-6	2012-12-19
104	Lead oxide sulfate (basic lead sulfate)	12036-76-9	2012-12-19
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)	69011-06-9	2012-12-19
106	Dioxobis(stearato)trilead	12578-12-0	2012-12-19
107	Fatty acids, C16-18, lead salts	91031-62-8	2012-12-19
108	Lead bis(tetrafluoroborate)	13814-96-5	2012-12-19



109	Lead cyanamide	20837-86-9	2012-12-19
110	Lead dinitrate	10099-74-8	2012-12-19
111	Lead oxide (lead monoxide)	1317-36-8	2012-12-19
112	Lead tetroxide (orange lead)	1314-41-6	2012-12-19
113	Lead titanium trioxide	12060-00-3	2012-12-19
114	Lead Titanium Zirconium Oxide	12626-81-2	2012-12-19
115	Pentalead tetraoxide sulphate	12065-90-6	2012-12-19
116	Pyrochlore, antimony lead yellow	8012-00-8	2012-12-19
117	Silicic acid, barium salt, lead-doped	68784-75-8	2012-12-19
118	Silicic acid, lead salt	11120-22-2	2012-12-19
119	Sulfurous acid, lead salt, dibasic	62229-08-7	2012-12-19
120	Tetraethyllead	78-00-2	2012-12-19
121	Tetralead trioxide sulphate	12202-17-4	2012-12-19
122	Trilead dioxide phosphonate	12141-20-7	2012-12-19
123	Furan	110-00-9	2012-12-19
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	2012-12-19
125	Diethyl sulphate	64-67-5	2012-12-19
126	Dimethyl sulphate	77-78-1	2012-12-19
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	2012-12-19
128	Dinoseb	88-85-7	2012-12-19
129	4,4'-methylenedi-o-toluidine	838-88-0	2012-12-19
130	4,4'-oxydianiline and its salts	101-80-4	2012-12-19
131	4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3	2012-12-19
132	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	2012-12-19
133	6-methoxy-m-toluidine (p-cresidine)	120-71-8	2012-12-19
134	Biphenyl-4-ylamine	92-67-1	2012-12-19
135	o-aminoazotoluene	97-56-3	2012-12-19
136	o-Toluidine; 2-Aminotoluene	95-53-4	2012-12-19
137	N-methylacetamide	79-16-3	2012-12-19
138	1-bromopropane; n-propyl bromide	106-94-5	2012-12-19
139	Pentadecafluorooctanoic acid (PFOA)	335-67-1	2013-6-20
140	Cadmium oxide	1306-19-0	2013-6-20
141	Ammoniumpentadecafluorooctanoate (APFO)	3825-26-1	2013-6-20
142	Cadmium	7440-43-9	2013-6-20
143	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	-	2013-6-20



	individual isomers and/or combinations thereof]		
144	Dipentyl phthalate (DPP)	131-18-0	2013-6-20
145	Cadmium sulphide	1306-23-6	2013-12-16
146	Dihexyl phthalate	84-75-3	2013-12-16
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene -1-sulphonate)(C.I. Direct Red 28)	573-58-0	2013-12-16
148	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]a zo]-5-hydroxy-6-(phenylazo)naphthalene-2,7- disulphonate(C.I. Direct Black 38)	1937-37-7	2013-12-16
149	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	2013-12-16
150	Lead di(acetate)	301-04-2	2013-12-16
151	Trixylyl phosphate	25155-23-1	2013-12-16
152	Cadmium chloride	10108-64-2	2014-06-16
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	2014-06-16
154	Sodium peroxometaborate	7632-04-4	2014-06-16
155	Sodium perborate; perboric acid, sodium salt	-	2014-06-16
156	Cadmium fluoride	7790-79-6	2014-12-17
157	Cadmium sulphate	10124-36-4; 31119-53-6	2014-12-17
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	2014-12-17
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	2014-12-17
160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradeca noate (DOTE)	15571-58-1	2014-12-17
161	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradeca noate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-o xo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	2014-12-17
162	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)	68515-51-5 68648-93-1	2015-06-15
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] [covering any of the individual stereoisomers of	-	2015-06-15



	[1] and [2] or any combination thereof]		
164	Nitrobenzene	98-95-3	2015-12-17
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	2015-12-17
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	2015-12-17
167	1,3-propanesultone	1120-71-4	2015-12-17
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	2015-12-17
169	Benzo[def]chrysene	50-32-8	2016-06-20
170	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	2017-09-06
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3830-45-3 3108-42-7	2017-09-06
172	<i>p</i> -(1,1-dimethylpropyl)phenol	80-46-6	2017-09-06
173	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	2017-09-06
174	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	2017-06-20
175	Chrysene	218-01-9	2018-01-15
176	Benz[a]anthracene	56-55-3	2018-01-15
177	Cadmium nitrate	10325-94-7	2018-01-15
178	Cadmium hydroxide	21041-95-2	2018-01-15
179	Cadmium carbonate	513-78-0	2018-01-15
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]	-	2018-01-15
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	2018-01-15
182	Octamethylcyclotetrasiloxane (D4)	556-67-2	2018-06-27
183	Decamethylcyclopentasiloxane (D5)	541-02-6	2018-06-27
184	Dodecamethylcyclohexasiloxane (D6)	540-97-6	2018-06-27
185	Lead	7439-92-1	2018-06-27



186	Disodium octaborate	12008-41-2	2018-06-27
187	Benzo[ghi]perylene	191-24-2	2018-06-27
188	Terphenyl hydrogenated	61788-32-7	2018-06-27
189	Ethylenediamine (EDA)	107-15-3	2018-06-27
190	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	2018-06-27
191	Dicyclohexyl phthalate (DCHP)	84-61-7	2018-06-27
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	2019-01-15
193	Benzo[k]fluoranthene	207-08-9	2019-01-15
194	Fluoranthene	206-44-0	2019-01-15
195	Phenanthrene	85-01-8	2019-01-15
196	Pyrene	129-00-0	2019-01-15
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	2019-01-15
198	2-methoxyethyl acetate	110-49-6	2019-07-16
199	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-	2019-07-16
200	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	-	2019-07-16
201	4-tert-butylphenol	98-54-4	2019-07-16
202	Diisohexyl phthalate	71850-09-4	2020-01-16
203	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	2020-01-16
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	2020-01-16
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	2020-01-16
206	1-vinylimidazole	1072-63-5	2020-06-25
207	2-methylimidazole	693-98-1	2020-06-25
208	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	2020-06-25
209	Butyl 4-hydroxybenzoate (Butylparaben)	94-26-8	2020-06-25
210	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	2021-01-19
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	-	2021-01-19

Signature: Jing-Fong Tsai

Date: 2021 / 1 / 28

Name: Jing-Fong Tsai

Title: Vice President / Quality Assurance and ESH Center