



# TAI-TECH ADVANCED ELECTRONICS CO., LTD.

## Declaration of Prohibited Substances

We assurance that the delivered to our customer are comply with RoHS Directive 2011/65/EU and REACH, Regulation (EC) No.1907/2006.

All parts fully follow the below standard and no exemptions declarable.

Standard / No.	Substance	CAS No.	Permissible Limit (by weight)	
RoHS Directive 2011/65/EU	1	Cadmium and its Compounds (Cd)	7439-92-1	100ppm (0.01%)
	2	Lead and its Compounds (Pb)	7439-92-1	1000ppm (0.1%)
	3	Mercury and its Compounds (Hg)	7439-97-6	1000ppm (0.1%)
	4	Hexavalent chromium Compounds (Cr6+ )	18540-29-9	1000ppm (0.1%)
	5	Polybrominated Biphenyls (PBBs)	-	1000ppm (0.1%)
	6	Polybrominated Diphenyl Ethers (PBDEs)	-	1000ppm (0.1%)
	7	Benzyl butyl phthalate (BBP)	85-68-7	1000ppm (0.1%)
	8	Dibutyl phthalate (DBP)	84-74-2	1000ppm (0.1%)
	9	Di- (2-ethylhexyl) phthalate (DEHP)	117-81-7	1000ppm (0.1%)
	10	Diisobutylphthalate(DIBP)	84-69-5	1000ppm (0.1%)
REACH, Regulation (EC) No.1907/2006	1	Anthracene	120-12-7	1000ppm (0.1%)
	2	4,4'-Diaminodiphenylmethane(MDA)	101-77-9	1000ppm (0.1%)
	3	Dibutylphthalate (DBP)	84-74-2	1000ppm (0.1%)
	4	Benzylbutylphthalate (BBP)	85-68-7	1000ppm (0.1%)
	5	Bis(2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	1000ppm (0.1%)
	6	5-tert-butyl-2,4,6-trinitro-m-xylene(muskxylene)	81-15-2	1000ppm (0.1%)
	7	Hexabromocyclododecane(HBCDD)andallmajordia stereoisomersidentified (α – HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4 3194-55-6	1000ppm (0.1%)
	8	Alkanes,C10I3,chloro(ShortChainChlorinatedParaffins)	85535-84-8	1000ppm (0.1%)
	9	Bis(tributyltin)oxide*2	56-35-9	1000ppm (0.1%)
	10	Cobaltdichloride	7646-79-9	1000ppm (0.1%)

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11	Diarsenicpentaoxide*2	1303-28-2	1000ppm (0.1%)
12	Diarsenictrioxide*2	1327-53-3	1000ppm (0.1%)
13	Triethylarsenate*2	15606-95-8	1000ppm (0.1%)
14	Leadhydrogenarsenate*2	7784-40-9	1000ppm (0.1%)
15	Sodiumdichromate*2	010588-01-9 7789-120-0	1000ppm (0.1%)
16	Anthraceneoil*3	90640-80-5	1000ppm (0.1%)
17	Anthraceneoil,anthracenepaste,distn.Lights*3	91995-17-4	1000ppm (0.1%)
18	Anthraceneoil,anthracenepaste,anthracenefraction* 3	91995-15-2	1000ppm (0.1%)
19	Anthraceneoil,anthracene-low*3	90640-82-7	1000ppm (0.1%)
20	Anthraceneoil,anthracenepaste*3	90640-81-6	1000ppm (0.1%)
21	Pitch,coaltar,high-temp.*3	65996-93-2	1000ppm (0.1%)
22	Diisobutylphthalate(DIBP)	84-69-5	1000ppm (0.1%)
23	2,4-Dinitrotoluene 2,4	121-14-2	1000ppm (0.1%)
24	Tris(2-chloroethyl)phosphate	115-96-8	1000ppm (0.1%)
25	Leadchromate	7758-97-6	1000ppm (0.1%)
26	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	1000ppm (0.1%)
27	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	1000ppm (0.1%)
28	Acrylamide	79-06-1	1000ppm (0.1%)
29	Sodium chromate	7775-11-3	1000ppm (0.1%)
30	Ammonium dichromate	7789-09-5	1000ppm (0.1%)
31	*Potassium dichromate	7778-50-9	1000ppm (0.1%)
32	Potassium chromate	7789-00-6	1000ppm (0.1%)
33	Boric acid	10043-35-3 11113-50-1	1000ppm (0.1%)
34	disodium tetraborate, anhydrous	1303-96-4 1330-43-4 12179-04-3	1000ppm (0.1%)
35	Tetraboron disodium heptaoxide, hydrate	12267-73-1	1000ppm (0.1%)
36	Trichloroethylene	79-01-6	1000ppm (0.1%)
37	Cobalt(II) sulphate	10124-43-3	1000ppm (0.1%)

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38	Cobalt(II) dinitrate	10141-05-6	1000ppm (0.1%)
39	Cobalt(II) carbonate	513-79-1	1000ppm (0.1%)
40	Cobalt(II) diacetate	71-48-7	1000ppm (0.1%)
41	2-Methoxyethanol	109-86-4	1000ppm (0.1%)
42	2-Ethoxyethanol	110-80-5	1000ppm (0.1%)
43	Chromium trioxide	1333-82-0	1000ppm (0.1%)
44	Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	7738-94-5 13530-68-2	1000ppm (0.1%)
45	1-methyl-2-pyrrolidone (NMP)	872-50-4	1000ppm (0.1%)
46	2-ethoxyethyl acetate (2-EEA)	111-15-9	1000ppm (0.1%)
47	Hydrazine	7803-57-8 302-01-2	1000ppm (0.1%)
48	1,2,3-trichloropropane (1,2,3-TCP)	96-18-4	1000ppm (0.1%)
49	strontium chromate	7789-06-2	1000ppm (0.1%)
50	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	1000ppm (0.1%)
51	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNU)	68515-42-4	1000ppm (0.1%)
52	Dichromium tris(chromate)	24613-89-6	1000ppm (0.1%)
53	Potassium hydroxyoctaoxodizincatedi-chromate	11103-86-9	1000ppm (0.1%)
54	Pentazinc chromate octahydroxide C.I.	49663-84-5	1000ppm (0.1%)
55	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	1000ppm (0.1%)
56	Bis(2-methoxyethyl) phthalate	117-82-8	1000ppm (0.1%)
57	2-Methoxyaniline; o-Anisidine	90-04-0	1000ppm (0.1%)
58	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	1000ppm (0.1%)
59	1,2-Dichloroethane	107-06-2	1000ppm (0.1%)
60	Bis(2-methoxyethyl) ether	111-96-6	1000ppm (0.1%)
61	Arsenic acid	7778-39-4	1000ppm (0.1%)
62	Calcium arsenate	7778-44-1	1000ppm (0.1%)
63	Trilead diarsenate	3687-31-8	1000ppm (0.1%)

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64	N,N-dimethylacetamide (DMAC)	127-19-5	1000ppm (0.1%)
65	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	1000ppm (0.1%)
66	Phenolphthalein	77-09-8	1000ppm (0.1%)
67	Lead diazide, Lead azide	13424-46-9	1000ppm (0.1%)
68	Lead styphnate	15245-44-0	1000ppm (0.1%)
69	Lead dipicrate	6477-64-1	1000ppm (0.1%)
70	Aluminosilicate Refractory Ceramic Fibres (RCF)	Extracted from Index no.650-017-00-8	1000ppm (0.1%)
71	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)	Extracted from Index no.650-017-00-8	1000ppm (0.1%)
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	1000ppm (0.1%)
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	1000ppm (0.1%)
74	Diboron trioxide	1303-86-2	1000ppm (0.1%)
75	Formamide	75-12-7	1000ppm (0.1%)
76	Lead(II) bis(methanesulfonate)	17570-76-2	1000ppm (0.1%)
77	TGIC(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	1000ppm (0.1%)
78	$\beta$ -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6	1000ppm (0.1%)
79	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	1000ppm (0.1%)
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	1000ppm (0.1%)
81	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	1000ppm (0.1%)
82	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	1000ppm (0.1%)
83	$\alpha,\alpha$ -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	1000ppm (0.1%)
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	1000ppm (0.1%)
85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	1000ppm (0.1%)

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86	Pentacosafuorotridecanoic acid	72629-94-8	1000ppm (0.1%)
87	Tricosafuorododecanoic acid	307-55-1	1000ppm (0.1%)
88	Henicosafuoroundecanoic acid	2058-94-8	1000ppm (0.1%)
89	Heptacosafuorotetradecanoic acid	376-06-7	1000ppm (0.1%)
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues	-	1000ppm (0.1%)
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	-	1000ppm (0.1%)
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	1000ppm (0.1%)
93	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7	1000ppm (0.1%)
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	1000ppm (0.1%)
95	Methoxy acetic acid	625-45-6	1000ppm (0.1%)
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	1000ppm (0.1%)
97	Diisopentylphthalate (DIPP)	605-50-5	1000ppm (0.1%)
98	N-pentyl-isopentylphthalate	-	1000ppm (0.1%)
99	1,2-Diethoxyethane	629-14-1	1000ppm (0.1%)
100	N,N-dimethylformamide; dimethyl formamide	68-12-2	1000ppm (0.1%)
101	Dibutyltin dichloride (DBT)	683-18-1	1000ppm (0.1%)
102	Acetic acid, lead salt, basic	51404-69-4	1000ppm (0.1%)
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)	1319-46-6	1000ppm (0.1%)
104	Lead oxide sulfate (basic lead sulfate)	12036-76-9	1000ppm (0.1%)
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)	69011-06-9	1000ppm (0.1%)
106	Dioxobis(stearato)trilead	12578-12-0	1000ppm (0.1%)
107	Fatty acids, C16-18, lead salts	91031-62-8	1000ppm (0.1%)
108	Lead bis(tetrafluoroborate)	13814-96-5	1000ppm (0.1%)

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109	Lead cyanamidate	20837-86-9	1000ppm (0.1%)
110	Lead dinitrate	10099-74-8	1000ppm (0.1%)
111	Lead oxide (lead monoxide)	1317-36-8	1000ppm (0.1%)
112	Lead tetroxide (orange lead)	1314-41-6	1000ppm (0.1%)
113	Lead titanium trioxide	12060-00-3	1000ppm (0.1%)
114	Lead Titanium Zirconium Oxide	12626-81-2	1000ppm (0.1%)
115	Pentalead tetraoxide sulphate	12065-90-6	1000ppm (0.1%)
116	Pyrochlore, antimony lead yellow	8012-00-8	1000ppm (0.1%)
117	Silicic acid, barium salt, lead-doped	68784-75-8	1000ppm (0.1%)
118	Silicic acid, lead salt	11120-22-2	1000ppm (0.1%)
119	Sulfurous acid, lead salt, dibasic	62229-08-7	1000ppm (0.1%)
120	Tetraethyllead	78-00-2	1000ppm (0.1%)
121	Tetralead trioxide sulphate	12202-17-4	1000ppm (0.1%)
122	Trilead dioxide phosphonate	12141-20-7	1000ppm (0.1%)
123	Furan	110-00-9	1000ppm (0.1%)
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	1000ppm (0.1%)
125	Diethyl sulphate	64-67-5	1000ppm (0.1%)
126	Dimethyl sulphate	77-78-1	1000ppm (0.1%)
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	1000ppm (0.1%)
128	Dinoseb	88-85-7	1000ppm (0.1%)
129	4,4'-methylenedi-o-toluidine	838-88-0	1000ppm (0.1%)
130	4,4'-oxydianiline and its salts	101-80-4	1000ppm (0.1%)
131	4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3	1000ppm (0.1%)
132	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	1000ppm (0.1%)
133	6-methoxy-m-toluidine (p-cresidine)	120-71-8	1000ppm (0.1%)
134	Biphenyl-4-ylamine	92-67-1	1000ppm (0.1%)
135	o-aminoazotoluene	97-56-3	1000ppm (0.1%)
136	o-Toluidine; 2-Aminotoluene	95-53-4	1000ppm (0.1%)
137	N-methylacetamide	79-16-3	1000ppm (0.1%)

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138	1-bromopropane; n-propyl bromide	106-94-5	1000ppm (0.1%)
139	Cadmium	7440-43-9	1000ppm (0.1%)
140	Cadmium oxide	1306-19-0	1000ppm (0.1%)
141	Ammoniumpentadecafluorootanoate (APFO)	3825-26-1	1000ppm (0.1%)
142	Pentadecafluorooctanoic acid (PFOA)	335-67-1	1000ppm (0.1%)
143	Dipentyl phthalate (DPP)	131-18-0	1000ppm (0.1%)
144	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]	-	1000ppm (0.1%)
145	Cadmium sulphide	1306-23-6	1000ppm (0.1%)
146	Dihexyl phthalate	84-75-3	1000ppm (0.1%)
147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)] bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	1000ppm (0.1%)
148	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	1000ppm (0.1%)
149	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	1000ppm (0.1%)
150	Lead di (acetate)	301-04-2	1000ppm (0.1%)
151	Trixylyl phosphate	25155-23-1	1000ppm (0.1%)
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	1000ppm (0.1%)
153	Cadmium chloride	10108-64-2	1000ppm (0.1%)
154	Sodium perborate; perboric acid, sodium salt	-	1000ppm (0.1%)
155	Sodium peroxometaborate	7632-04-4	1000ppm (0.1%)
156	Cadmium fluoride	7790-79-6	1000ppm (0.1%)
157	Cadmium sulphate	10124-36-4 31119-53-6	1000ppm (0.1%)
158	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	1000ppm (0.1%)
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	1000ppm (0.1%)

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160	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	1000ppm (0.1%)
161	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)	-	1000ppm (0.1%)
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate	68515-51-5; 68648-93-1	1000ppm (0.1%)
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 isomers of [1] and [2] or any combination thereof]	-	1000ppm (0.1%)
164	1,3-Propanesultone	1120-71-4	1000ppm (0.1%)
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	1000ppm (0.1%)
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	1000ppm (0.1%)
167	Nitrobenzene	98-95-3	1000ppm (0.1%)
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononanoic acid and its sodium and ammonium salts)	375-95-1 21049-39-8 4149-60-4	1000ppm (0.1%)
169	Benzo[def]chrysene	50-32-8	1000ppm (0.1%)
170	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	1000ppm (0.1%)
171	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]	-	1000ppm (0.1%)
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7 335-76-2 3830-45-3	1000ppm (0.1%)
173	p-(1,1-dimethylpropyl)phenol	80-46-6	1000ppm (0.1%)

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174	4,4' -isopropylidenediphenol (bisphenol A; BPA)	80-05-7	1000ppm (0.1%)
175	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	1000ppm (0.1%)

Name : TAI-TECH ADVANCED ELECTRONICS CO., LTD.

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Date : 2017/04/19

Person in charge : Nick Chang/QA Department Manager

Signature and chop : *Nick Chang*

