



Pony Testing International Group

Test Report

No.: NLCKF0QR43489704

Date: 2017.10.19

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(SVHC)

Applicant:

JINAN LUJING SEMICONDUCTOR CO.,LTD

(JINAN HUIFENGZHONGTIAN(HFZT) ELECTRONIC CO.,LTD)

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Name: Plastic diodes plastic transistors bridge

Sample Model: DO-41/15/27 R-1/R-6/SMA/SMB/SMC/MBS/MBF/DB/WOM/RS-1/2/6/KBL/KBU/
KBJ/KBP,KBPC,SOT-23/323/363/523/723/923/113/89;SOD-123/323/523/723/
923,TO-92/126/220/251/252/3P/263/277 ABS SOP-4/SOP-8 DFN/QFN

Sample Received Date: 2017.10.12

Testing Period: 2017.10.12 To 2017.10.19

Reference specification: Very High Concern (SVHC) testing Based on the list published by European Chemicals Agency (ECHA) on 28 Oct 2008, 13 Jan 2010, 30 Mar 2010, 18 Jun 2010, 15 Dec 2010, 20 Jun 2011, 19 Dec 2011, 18 Jun 2012, 19 Dec 2012, 20 Jun 2013, 16 Dec 2013, 16 Jun 2014,17 Dec 2014,15 Jun 2015, 17 Dec 2015, 20 Jun 2016, 19 Dec 2016 and 16 Jun 2017 regarding Regulation (EC) No 1907/2006 concerning the REACH. Screening tests based on customer requirements.

Test result(s): Please refer to next page(s)

Summary: According to the analytical results, concentrations of 174 SVHC substances are less than 0.1% in the submitted sample.

Approved by: *Gaoshenxia*

Code: Igucs9e5



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Reference Methods:

No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
1	Anthracene	Refer to EPA 3540C:1996 & EPA 8270D:2014, GC-MS	PBT
2	Benzyl butyl phthalate (BBP)	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
3	Dibutyl phthalate (DBP)	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
4	Bis (2-ethylhexyl)phthalate (DEHP)	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	Refer to EPA 3540C:1996, GC-MS	PBT
6	4,4'- Diaminodiphenylmethane (MDA)	Refer to EN 14362-1:2012, GC-MS	Carcinogen
7	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	Refer to EPA 3540C:1996, GC-MS	PBT, vPvB
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	Refer to EPA 3540C:1996, GC-MS	vPvB
9	Triethyl arsenate ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen
10	Bis(tributyltin)oxide(TBTO)	Refer to DIN EN ISO 17353:2005, GC-MS	PBT
11	Cobalt dichloride ⁽¹⁾	Refer to EPA 3052:1996 & EN14582:2007, ICP-OES & IC	Carcinogen, Toxic for reproduction
12	Diarsenic pentaoxide ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen
13	Diarsenic trioxide ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen
14	Sodium dichromate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 3060A:1996 & EPA 9056A:2007, ICP-OES & UV-Vis	Carcinogen, Mutagen, Toxic for reproduction
15	Lead hydrogen arsenate ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen, Toxic for reproduction

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
16	2,4-Dinitrotoluene	Pony-In-house method, GC-MS	Carcinogen
17	Anthracene oil ⁽²⁾	Pony-In-house method, GC-MS	Carcinogen, PBT, vPvB
18	Anthracene oil, anthracene paste, distn. lights ⁽²⁾	Pony-In-house method, GC-MS	Carcinogen, mutagen, PBT and vPvB
19	Anthracene oil, anthracene paste, anthracene fraction ⁽²⁾	Pony-In-house method, GC-MS	Carcinogen, mutagen, PBT and vPvB
20	Anthracene oil, anthracene-low ⁽²⁾	Pony-In-house method, GC-MS	Carcinogen, mutagen, PBT and vPvB
21	Anthracene oil, anthracene paste ⁽²⁾	Pony-In-house method, GC-MS	Carcinogen, mutagen, PBT and vPvB
22	Diisobutyl phthalate	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
23	Lead chromate ⁽³⁾	Refer to EPA 3052:1996 & EPA 3060A:1996, ICP-OES & UV-Vis	Carcinogen, Toxic for reproduction
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) ⁽³⁾		Carcinogen, Toxic for reproduction
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34) ⁽³⁾		Carcinogen, Toxic for reproduction
26	Tris(2-chloroethyl)phosphate	Pony-In-house method, GC-MS	Toxic for reproduction
27	Pitch, coal tar, high temp. ⁽²⁾	Pony-In-house method, GC-MS	Carcinogen, PBT, vPvB
28	Acrylamide	Pony-In-house method, HPLC	Carcinogen, Mutagen
29	Trichloroethylene	Refer to EPA 5021:1996, GC	Carcinogen
30	Boric acid ⁽¹⁾	Pony-In-house method, ICP-OES	Toxic for reproduction
31	Disodium tetraborate, anhydrous ⁽¹⁾	Pony-In-house method, ICP-OES	Toxic for reproduction
32	Tetraboron disodium heptaoxide, hydrate ⁽¹⁾	Pony-In-house method, ICP-OES	Toxic for reproduction
33	Sodium chromate ⁽¹⁾	Pony-In-house method, UV-Vis	Carcinogen, Mutagen, Toxic for reproduction
34	Potassium chromate ⁽¹⁾	Pony-In-house method, UV-Vis	Carcinogen, Mutagen
35	Potassium dichromate ⁽¹⁾	Pony-In-house method, UV-Vis	Carcinogen, Mutagen, Toxic for reproduction
36	Ammonium dichromate ⁽¹⁾	Pony-In-house method, UV-Vis	Carcinogen, Mutagen, Toxic for reproduction

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
37	Cobalt(II) sulphate ⁽¹⁾	Pony-In-house method, ICP-OES/IC	Carcinogen, Toxic for reproduction
38	Cobalt(II) dinitrate ⁽¹⁾	Pony-In-house method, ICP-OES/IC	Carcinogen, Toxic for reproduction
39	Cobalt(II) carbonate ⁽¹⁾	Pony-In-house method, ICP-OES/IC	Carcinogen, Toxic for reproduction
40	Cobalt(II) diacetate ⁽¹⁾	Pony-In-house method, ICP-OES/IC	Carcinogen, Toxic for reproduction
41	2-Methoxyethanol	Pony-In-house method, GC	Toxic for reproduction
42	2-Ethoxyethanol	Pony-In-house method, GC	Toxic for reproduction
43	Chromium trioxide ⁽¹⁾	Pony-In-house method, UV-Vis	Carcinogen, Mutagen
44	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers ⁽¹⁾	Chromic acid	Carcinogen
		Dichromic acid	Carcinogen
		Oligomers of chromic acid and dichromic acid	Carcinogen
45	2-Ethoxyethyl acetate	Pony-In-house method, GC	Toxic for reproduction
46	Strontium chromate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters ⁽²⁾	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
48	Hydrazine	Pony-In-house method, UV-Vis	Carcinogen
49	1-Methyl-2-pyrrolidone	Refer to EPA 8270D:2014, GC-MS	Toxic for reproduction
50	1,2,3-Trichloropropane	Refer to EPA 5021:1996, GC	Carcinogen, Toxic for reproduction
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich ⁽²⁾	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction

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Reference Methods:

No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
52	Dichromium tris(chromate) ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
53	Potassium hydroxyoctaoxidizincatedichromate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
54	Pentazinc chromate octahydroxide ⁽³⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
55	Aluminosilicate Refractory Ceramic Fibres (RCF) ⁽³⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
56	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) ⁽³⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
57	Formaldehyde, oligomeric reaction products with aniline ⁽³⁾	Pony-In-house method, FTIR	Carcinogen
58	Bis(2-methoxyethyl) phthalate	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
59	2-Methoxyaniline; o-Anisidine	Refer to EN 14362-1:2012, GC-MS	Carcinogen
60	4-(1,1,3,3-tetramethylbutyl)phenol	Pony-In-house method, GC-MS	Equivalent concern
61	1,2-dichloroethane	Refer to EPA 5021:1996, GC	Carcinogen
62	Bis(2-methoxyethyl) ether	Refer to EPA 8270D:2014, GC-MS	Toxic for reproduction
63	Arsenic acid ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
64	Calcium arsenate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen
65	Trilead diarsenate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Carcinogen, Toxic for reproduction
66	N,N-dimethylacetamide	Refer to EPA 3550C:2007,GC	Toxic for reproduction
67	Phenolphthalein	Pony-In-house method, HPLC	Carcinogen
68	2,2'-dichloro-4,4'-methylenedianiline	Refer to EN 14362-1:2012, GC-MS	Carcinogen
69	Lead diazide, Lead azide ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction
70	Lead styphnate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction
71	Lead dipicrate ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	Refer to EPA 8270D:2014, GC-MS	Toxic for reproduction
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	Refer to EPA 8270D:2014, GC-MS	Toxic for reproduction
74	Diboron trioxide ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction
75	Formamide	Refer to EPA 8270D:2014, GC-MS	Toxic for reproduction
76	Lead(II) bis(methanesulfonate) ⁽¹⁾	Refer to EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction
77	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	Pony-In-house method, GC-MS	Mutagen
78	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) ⁽⁴⁾	Refer to EPA 8270D:2014, GC-MS	Mutagen
79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	Refer to EPA 8270D:2014, GC-MS	Carcinogen
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	Refer to EPA 8270D:2014, GC-MS	Carcinogen
81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	Pony-In-house method, HPLC	Carcinogen
82	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl]methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	Pony-In-house method, HPLC	Carcinogen
83	α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	Pony-In-house method, HPLC	Carcinogen
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	Pony-In-house method, HPLC	Carcinogen

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	Refer to IEC 62321-6 Edition 1.0:2015, GC-MS	PBT, vPvB
86	Pentacosafuorotridecanoic acid	Refer to EPA 3550C:2007, LC-MS/MS	vPvB
87	Tricosafuorododecanoic acid		vPvB
88	Henicosafuoroundecanoic acid		vPvB
89	Heptacosafuorotetradecanoic acid		vPvB
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated ⁽²⁾	Refer to EPA 3550C:2007, HPLC	Equivalent concern
91	4-Nonylphenol, branched and linear ⁽²⁾		Equivalent concern
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	Refer to EPA 3550C:2007, HPLC	Equivalent concern
93	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	Refer to EPA 3540C:1996, GC-MS	Equivalent concern
94	Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride		Equivalent concern
95	Methoxyacetic acid	Refer to EPA 3550C:2007, GC-MS	Toxic for reproduction; Equivalent concern
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
97	Diisopentylphthalate		Toxic for reproduction
98	N-pentyl-isopentylphthalate		Toxic for reproduction
99	1,2-Diethoxyethane	Refer to EPA 3550C:2007, GC-MS	Toxic for reproduction
100	N,N-dimethylformamide	Refer to EPA 3550C:2007, GC	Toxic for reproduction

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
101	Dibutyltin dichloride (DBTC)	Refer to DIN EN ISO 17353:2005,GC-MS	Toxic for reproduction
102	Acetic acid, lead salt, basic ⁽¹⁾	Refer to EPA 3050B:1996 & EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction
103	Trilead bis(carbonate)dihydroxide ⁽¹⁾		
104	Lead oxide sulphate ⁽¹⁾		
105	[Phthalato(2-)]dioxotrilead ⁽¹⁾	Refer to EPA 3050B:1996 & EPA 3052:1996 & EPA 6010C:2007 & EPA 3550C:2007, ICP-OES & GC-MS	Toxic for reproduction
106	Dioxobis(stearato)trilead ⁽¹⁾		
107	Fatty acids, C16-18, lead salts ⁽¹⁾		
108	Lead bis(tetrafluoroborate) ⁽¹⁾		
109	Lead cyanamate ⁽¹⁾	Refer to EPA 3050B:1996 & EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction
110	Lead dinitrate ⁽¹⁾		
111	Lead monoxide (lead oxide) ⁽¹⁾		
112	Orange lead (lead tetroxide) ⁽¹⁾		
113	Lead titanium trioxide ⁽¹⁾		
114	Lead titanium zirconium oxide ⁽¹⁾		
115	Pentalead tetraoxide sulphate ⁽³⁾		
116	Pyrochlore, antimony lead yellow ⁽³⁾		
117	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped ⁽³⁾		
118	Silicic acid, lead salt ⁽¹⁾		
119	Sulfurous acid, lead salt, dibasic ⁽¹⁾	Refer to EPA 3050B:1996 & EPA 3052:1996 & EPA 6010C:2007 & EPA 3550C:2007, ICP-OES & GC-MS	Toxic for reproduction
120	Tetraethyllead ⁽¹⁾		
121	Tetralead trioxide sulphate ⁽¹⁾		
122	Trilead dioxide phosphonate ⁽¹⁾	Refer to EPA 3050B:1996 & EPA 3052:1996 & EPA 6010C:2007, ICP-OES	Toxic for reproduction

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123	Furan	Refer to EPA 5021:1996, GC	Carcinogen
124	Methyloxirane (Propylene oxide)		Carcinogen, Mutagen
125	Diethyl sulphate	Refer to EPA 3550C:2007, HPLC	Carcinogen, Mutagen
126	Dimethyl sulphate		Carcinogen
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	Refer to EPA 3550C:2007, GC-MS	Toxic for reproduction
128	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	Refer to EPA 3550C:2007, HPLC	Toxic for reproduction
129	4,4'-methylenedi-o-toluidine	Refer to EN 14362-1&3:2012, GC-MS	Carcinogen
130	4,4'-oxydianiline and its salts		Carcinogen, Mutagen
131	4-Aminoazobenzene		Carcinogen
132	4-methyl-m-phenylenediamine (toluene-2,4-diamine)		Carcinogen
133	6-methoxy-m-toluidine (p-cresidine)		Carcinogen
134	Biphenyl-4-ylamine		Carcinogen
135	o-aminoazotoluene		Carcinogen
136	o-Toluidine		Carcinogen
137	N-methylacetamide	Refer to EPA 3550C:2007, GC-MS	Toxic for reproduction
138	1-bromopropane (n-propyl bromide)	Refer to EPA 5021:1996, GC	Toxic for reproduction
139	Cadmium	Refer to EPA 3052:1996, ICP-OES	Carcinogen, Equivalent concern
140	Cadmium oxide ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen, Equivalent concern
141	Dipentyl phthalate (DPP)	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
142	4-Nonylphenol, branched and linear, ethoxylated ⁽²⁾	Refer to EPA 3550C:2007, HPLC	Equivalent concern
143	Ammonium pentadecafluorooctanoate (APFO)	Refer to EPA 3550C:2007, LC-MS/MS	Toxic for reproduction, PBT
144	Pentadecafluorooctanoic acid (PFOA)	Refer to EPA 3550C:2007, LC-MS/MS	Toxic for reproduction, PBT

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
145	Cadmium sulphide ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen, Equivalent concern
146	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)	Pony-In-house method, GC-MS	Carcinogen
147	Dihexyl phthalate	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	Pony-In-house method, GC-MS	Toxic for reproduction
149	Trixylyl phosphate	Refer to EPA 8270D:2014, GC-MS	Toxic for reproduction
150	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	Pony-In-house method, HPLC	Carcinogen
151	Lead di(acetate) ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Toxic for reproduction
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
153	Sodium perborate; perboric acid, sodium salt ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Toxic for reproduction
154	Sodium peroxometaborate ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Toxic for reproduction
155	Cadmium chloride ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	CMR, Equivalent concern

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156	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	Refer to EPA 3540C:1996, GC-MS	PBT, vPvB
157	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	Refer to EPA 3540C:1996, GC-MS	PBT, vPvB
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) ⁽²⁾	Refer to EPA 3052:1996, ICP-OES	Toxic for reproduction
159	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) ⁽²⁾⁽³⁾	Refer to EPA 3052:1996, ICP-OES	Toxic for reproduction
160	Cadmium fluoride ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen, Mutagen, Toxic for reproduction, Equivalent concern
161	Cadmium sulphate ⁽¹⁾	Refer to EPA 3052:1996, ICP-OES	Carcinogen, Mutagen, Toxic for reproduction, Equivalent concern
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) ⁽²⁾	Refer to EPA 8061A:1996, GC-MS	Toxic for reproduction
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 [1] and [2] or any combination thereof] ⁽²⁾	Refer to EPA 8270D:2014, GC-MS	vPvB

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No.	Substance Name(s)	Reference Methods and Equipments	Substance Classification
164	1,3-propanesultone	Pony-In-house method,GC-MS	Carcinogenic
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	EPA 3540C:1996,GC-MS	vPvB
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	EPA 3540C:1996,GC-MS	vPvB
167	Nitrobenzene	EPA 8270D:2014,GC-MS	Toxic for reproduction
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts ⁽²⁾	EPA 3550C:2007,LC-MS/MS	Toxic for reproduction; PBT
169	Benzo[def]chrysene (Benzo[a]pyrene)	EPA 3540C:1996,GC-MS	Carcinogenic, Mutagenic, Toxic for reproduction, PBT, vPvB
170	4-Heptylphenol, branched and linear ⁽³⁾	Pony-In-house method, HPLC	Equivalent concern
171	Nonadecafluorodecanoic acid and its sodium and ammonium salts ⁽³⁾	Pony-In-house method, LC-MS/MS	Toxic for reproduction, vPvB
172	p-(1,1-dimethylpropyl)phenol	Pony-In-house method, HPLC	Equivalent concern
173	4,4'-isopropylidenediphenol (bisphenol A; BPA)	Pony-In-house method, HPLC	Toxic for reproduction, endocrine disrupting properties
174	Perfluorohexane-1-sulphonic acid and its salts	Pony-In-house method, UPLC-MS/MS	vPvB

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Test result (Unit: %)

No.	SVHC	CAS number	EC number	DL	Test Result
1	Anthracene	120-12-7	204-371-1	0.0005	N.D.
2	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7	0.005	N.D.
3	Dibutyl phthalate (DBP)	84-74-2	201-557-4	0.005	N.D.
4	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	204-211-0	0.005	N.D.
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)	247-148-4/221-695-9	0.005	N.D.
6	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	202-974-4	0.005	N.D.
7	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	0.01	N.D.
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	0.005	N.D.
9	Triethyl arsenate ⁽¹⁾	15606-95-8	427-700-2	0.005	N.D.
10	Bis(tributyltin)oxide(TBTO)	56-35-9	200-268-0	0.01	N.D.
11	Cobalt dichloride ⁽¹⁾	7646-79-9	231-589-4	0.01	N.D.
12	Diarsenic pentaoxide ⁽¹⁾	1303-28-2	215-116-9	0.01	N.D.
13	Diarsenic trioxide ⁽¹⁾	1327-53-3	215-481-4	0.01	N.D.
14	Sodium dichromate ⁽¹⁾	7789-12-0, 10588-01-9	234-190-3	0.01	N.D.
15	Lead hydrogen arsenate ⁽¹⁾	7784-40-9	232-064-2	0.01	N.D.

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Test result (Unit: %)

No.	SVHC	CAS number	EC number	DL	Test Result
16	2,4-Dinitrotoluene	121-14-2	204-450-0	0.01	N.D.
17	Anthracene oil ⁽²⁾	90640-80-5	292-602-7	0.050	N.D.
18	Anthracene oil, anthracene paste, distn. lights ⁽²⁾	91995-17-4	295-278-5		
19	Anthracene oil, anthracene paste, anthracene fraction ⁽²⁾	91995-15-2	295-275-9		
20	Anthracene oil, anthracene-low ⁽²⁾	90640-82-7	292-604-8		
21	Anthracene oil, anthracene paste ⁽²⁾	90640-81-6	292-603-2		
22	Diisobutyl phthalate	84-69-5	201-553-2	0.005	N.D.
23	Lead chromate ⁽³⁾	7758-97-6	231-846-0	0.005	N.D.
24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) ⁽³⁾	12656-85-8	235-759-9	0.005	N.D.
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34) ⁽³⁾	1344-37-2	215-693-7	0.005	N.D.
26	Tris(2-chloroethyl)phosphate	115-96-8	204-118-5	0.005	N.D.
27	Pitch, coal tar, high temp. ⁽²⁾	65996-93-2	266-028-2	0.050	N.D.
28	Acrylamide	79-06-1	201-173-7	0.005	N.D.
29	Trichloroethylene	79-01-6	201-167-4	0.01	N.D.
30	Boric acid ⁽¹⁾	10043-35-3/ 11113-50-1	233-139-2/ 234-343-4	0.01	N.D.
31	Disodium tetraborate, anhydrous ⁽¹⁾	1330-43-4 12179-04-3 1303-96-4	215-540-4	0.01	N.D.
32	Tetraboron disodium heptaoxide, hydrate ⁽¹⁾	12267-73-1	235-541-3	0.01	N.D.
33	Sodium chromate ⁽¹⁾	7775-11-3	231-889-5	0.01	N.D.
34	Potassium chromate ⁽¹⁾	7789-00-6	232-140-5	0.01	N.D.
35	Potassium dichromate ⁽¹⁾	7778-50-9	231-906-6	0.01	N.D.
36	Ammonium dichromate ⁽¹⁾	7789-09-5	232-143-1	0.01	N.D.

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(SVHC)

Test result (Unit: %)

No.	SVHC	CAS number	EC number	DL	Test Result	
37	Cobalt(II) sulphate ⁽¹⁾	10124-43-3	233-334-2	0.01	N.D.	
38	Cobalt(II) dinitrate ⁽¹⁾	10141-05-6	233-402-1	0.01	N.D.	
39	Cobalt(II) carbonate ⁽¹⁾	513-79-1	208-169-4	0.01	N.D.	
40	Cobalt(II) diacetate ⁽¹⁾	71-48-7	200-755-8	0.01	N.D.	
41	2-Methoxyethanol	109-86-4	203-713-7	0.01	N.D.	
42	2-Ethoxyethanol	110-80-5	203-804-1	0.01	N.D.	
43	Chromium trioxide ⁽¹⁾	1333-82-0	215-607-8	0.01	N.D.	
44	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers ⁽¹⁾	Chromic acid	7738-94-5 13530-68-2	231-801-5 236-881-5	0.01	N.D.
		Dichromic acid			0.01	N.D.
		Oligomers of chromic acid and dichromic acid			0.01	N.D.
45	2-Ethoxyethyl acetate	111-15-9	203-839-2	0.01	N.D.	
46	Strontium chromate ⁽¹⁾	7789-06-2	232-142-6	0.01	N.D.	
47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters ⁽²⁾	68515-42-4	271-084-6	0.01	N.D.	
48	Hydrazine	7803-57-8 302-01-2	206-114-9	0.01	N.D.	
49	1-Methyl-2-pyrrolidone	872-50-4	212-828-1	0.01	N.D.	
50	1,2,3-Trichloropropane	96-18-4	202-486-1	0.01	N.D.	
51	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich ⁽²⁾	71888-89-6	276-158-1	0.01	N.D.	

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Test result (Unit: %)

No.	SVHC	CAS number	EC number	DL	Test Result
52	Dichromium tris(chromate) ⁽¹⁾	24613-89-6	246-356-2	0.01	N.D.
53	Potassium hydroxyoctaoxodizincatedichromate ⁽¹⁾	11103-86-9	234-329-8	0.01	N.D.
54	Pentazinc chromate octahydroxide ⁽³⁾	49663-84-5	256-418-0	0.01	N.D.
55	Aluminosilicate Refractory Ceramic Fibres (RCF) ⁽³⁾	—	—	0.01	N.D.
56	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) ⁽³⁾	—	—	0.01	N.D.
57	Formaldehyde, oligomeric reaction products with aniline ⁽³⁾	25214-70-4	500-036-1	0.05	N.D.
58	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	0.005	N.D.
59	2-Methoxyaniline; o-Anisidine	90-04-0	201-963-1	0.005	N.D.
60	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	205-426-2	0.005	N.D.
61	1,2-dichloroethane	107-06-2	203-458-1	0.01	N.D.
62	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	0.01	N.D.
63	Arsenic acid ⁽¹⁾	7778-39-4	231-901-9	0.01	N.D.
64	Calcium arsenate ⁽¹⁾	7778-44-1	231-904-5	0.01	N.D.
65	Trilead diarsenate ⁽¹⁾	3687-31-8	222-979-5	0.01	N.D.
66	N,N-dimethylacetamide	127-19-5	204-826-4	0.01	N.D.
67	Phenolphthalein	77-09-8	201-004-7	0.01	N.D.
68	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	202-918-9	0.005	N.D.
69	Lead diazide, Lead azide ⁽¹⁾	13424-46-9	236-542-1	0.01	N.D.
70	Lead styphnate ⁽¹⁾	15245-44-0	239-290-0	0.01	N.D.
71	Lead dipicrate ⁽¹⁾	6477-64-1	229-335-2	0.01	N.D.

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Test result (Unit: %)

No.	SVHC	CAS number	EC number	DL	Test Result
72	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3	0.01	N.D.
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	0.01	N.D.
74	Diboron trioxide ⁽¹⁾	1303-86-2	215-125-8	0.01	N.D.
75	Formamide	75-12-7	200-842-0	0.01	N.D.
76	Lead(II) bis(methanesulfonate) ⁽¹⁾	17570-76-2	401-750-5	0.01	N.D.
77	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazine-2,4,6-trione (TGIC)	2451-62-9	219-514-3	0.01	N.D.
78	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) ⁽⁴⁾	59653-74-6	423-400-0	0.01	N.D.
79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	90-94-8	202-027-5	0.01	N.D.
80	N,N,N',N'-tetramethyl-4,4'-methylenedi aniline (Michler's base)	101-61-1	202-959-2	0.01	N.D.
81	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	208-953-6	0.01	N.D.
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	219-943-6	0.01	N.D.
83	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	229-851-8	0.01	N.D.
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	209-218-2	0.01	N.D.

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Test result (Unit: %)

No.	Test item	CAS number	EC number	DL	Test Result
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	214-604-9	0.005	N.D.
86	Pentacosafuorotridecanoic acid	72629-94-8	276-745-2	0.005	N.D.
87	Tricosafuorododecanoic acid	307-55-1	206-203-2	0.005	N.D.
88	Henicosafuoroundecanoic acid	2058-94-8	218-165-4	0.005	N.D.
89	Heptacosafuorotetradecanoic acid	376-06-7	206-803-4	0.005	N.D.
90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated ⁽²⁾	—	—	0.01	N.D.
91	4-Nonylphenol, branched and linear ⁽²⁾	—	—	0.01	N.D.
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	0.005	N.D.
93	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	0.01	N.D.
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	247-094-1, 243-072-0, 256-356-4, 260-566-1	0.01	N.D.
95	Methoxyacetic acid	625-45-6	210-894-6	0.01	N.D.
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2	0.01	N.D.
97	Diisopentylphthalate	605-50-5	210-088-4	0.005	N.D.
98	N-pentyl-isopentylphthalate	776297-69-9	—	0.005	N.D.
99	1,2-Diethoxyethane	629-14-1	211-076-1	0.01	N.D.
100	N,N-dimethylformamide	68-12-2	200-679-5	0.01	N.D.

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Test result (Unit: %)

No.	Test item	CAS number	EC number	DL	Test Result
101	Dibutyltin dichloride (DBTC)	683-18-1	211-670-0	0.01	N.D.
102	Acetic acid, lead salt, basic ⁽¹⁾	51404-69-4	257-175-3	0.01	N.D.
103	Trilead bis(carbonate)dihydroxide ⁽¹⁾	1319-46-6	215-290-6	0.01	N.D.
104	Lead oxide sulphate ⁽¹⁾	12036-76-9	234-853-7	0.01	N.D.
105	[Phthalato(2-)]dioxotrilead ⁽¹⁾	69011-06-9	273-688-5	0.01	N.D.
106	Dioxobis(stearato)trilead ⁽¹⁾	12578-12-0	235-702-8	0.01	N.D.
107	Fatty acids, C16-18, lead salts ⁽¹⁾	91031-62-8	292-966-7	0.01	N.D.
108	Lead bis(tetrafluoroborate)(1)	13814-96-5	237-486-0	0.01	N.D.
109	Lead cyanamate(1)	20837-86-9	244-073-9	0.01	N.D.
110	Lead dinitrate(1)	10099-74-8	233-245-9	0.01	N.D.
111	Lead monoxide (lead oxide)(1)	1317-36-8	215-267-0	0.01	N.D.
112	Orange lead (lead tetroxide)(1)	1314-41-6	215-235-6	0.01	N.D.
113	Lead titanium trioxide(1)	12060-00-3	235-038-9	0.01	N.D.
114	Lead titanium zirconium oxide(1)	12626-81-2	235-727-4	0.01	N.D.
115	Pentalead tetraoxide sulphate(3)	12065-90-6	235-067-7	0.01	N.D.
116	Pyrochlore, antimony lead yellow(3)	8012-00-8	232-382-1	0.01	N.D.
117	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped(3)	68784-75-8	272-271-5	0.01	N.D.
118	Silicic acid, lead salt(1)	11120-22-2	234-363-3	0.01	N.D.
119	Sulfurous acid, lead salt, dibasic(1)	62229-08-7	263-467-1	0.01	N.D.
120	Tetraethyllead(1)	78-00-2	201-075-4	0.01	N.D.
121	Tetralead trioxide sulphate(1)	12202-17-4	235-380-9	0.01	N.D.
122	Trilead dioxide phosphonate(1)	12141-20-7	235-252-2	0.01	N.D.

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Test result (Unit: %)

No.	Test item	CAS number	EC number	DL	Test Result
123	Furan	110-00-9	203-727-3	0.01	N.D.
124	Methyloxirane (Propylene oxide)	75-56-9	200-879-2	0.01	N.D.
125	Diethyl sulphate	64-67-5	200-589-6	0.01	N.D.
126	Dimethyl sulphate	77-78-1	201-058-1	0.01	N.D.
127	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7	0.01	N.D.
128	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	201-861-7	0.01	N.D.
129	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	0.005	N.D.
130	4,4'-oxydianiline and its salts	101-80-4	202-977-0	0.005	N.D.
131	4-Aminoazobenzene	60-9-3	200-453-6	0.005	N.D.
132	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	202-453-1	0.005	N.D.
133	6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1	0.005	N.D.
134	Biphenyl-4-ylamine	92-67-1	202-177-1	0.005	N.D.
135	o-aminoazotoluene	97-56-3	202-591-2	0.005	N.D.
136	o-Toluidine	95-53-4	202-429-0	0.005	N.D.
137	N-methylacetamide	79-16-3	201-182-6	0.01	N.D.
138	1-bromopropane (n-propyl bromide)	106-94-5	203-445-0	0.01	N.D.
139	Cadmium	7440-43-9	231-152-8	0.005	N.D.
140	Cadmium oxide ⁽¹⁾	1306-19-0	215-146-2	0.005	N.D.
141	Dipentyl phthalate (DPP)	131-18-0	205-017-9	0.005	N.D.
142	4-Nonylphenol, branched and linear, ethoxylated ⁽²⁾	—	—	0.01	N.D.
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4	0.005	N.D.
144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9	0.005	N.D.

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Test result (Unit: %)

No.	Test item	CAS number	EC number	DL	Test Result
145	Cadmium sulphide ⁽¹⁾	1306-23-6	215-147-8	0.005	N.D.
146	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	217-710-3	0.01	N.D.
147	Dihexyl phthalate	84-75-3	201-559-5	0.005	N.D.
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	202-506-9	0.01	N.D.
149	Trixylyl phosphate	25155-23-1	246-677-8	0.05	N.D.
150	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)] bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	209-358-4	0.01	N.D.
151	Lead di(acetate) ⁽¹⁾	301-04-2	206-104-4	0.01	N.D.
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5	0.005	N.D.
153	Sodium perborate; perboric acid, sodium salt ⁽¹⁾	—	239-172-9; 234-390-0	0.01	N.D.
154	Sodium peroxometaborate ⁽¹⁾	7632-04-4	231-556-4	0.01	N.D.
155	Cadmium chloride ⁽¹⁾	10108-64-2	233-296-7	0.01	N.D.

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Test result (Unit: %)

No.	Test item	CAS number	EC number	DL	Test Result
156	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6	0.01	N.D.
157	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	0.01	N.D.
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) ⁽²⁾	15571-58-1	239-622-4	0.05	N.D.
159	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) ⁽²⁾⁽³⁾	---	---	0.05	N.D.
160	Cadmium fluoride ⁽¹⁾	7790-79-6	232-222-0	0.01	N.D.
161	Cadmium sulphate ⁽¹⁾	10124-36-4 31119-53-6	233-331-6	0.01	N.D.
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) ⁽²⁾	68515-51-5 68648-93-1	271-094-0 272-013-1	0.01	N.D.
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 [1] and [2] or any combination thereof] ⁽²⁾	---	---	0.01	N.D.
164	1,3-propanesultone	1120-71-4	214-317-9	0.01	N.D.
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	0.01	N.D.

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(SVHC)

No.: NLCKF0QR43489704

Date: 2017.10.19

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Test result (Unit: %)

No.	Test item	CAS number	EC number	DL	Test Result
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	0.01	N.D.
167	Nitrobenzene	98-95-3	202-716-0	0.01	N.D.
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts ⁽²⁾	375-95-1 21049-39-8 4149-60-4	206-801-3	0.005	N.D.
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	0.050	N.D.
170	4-Heptylphenol, branched and linear ⁽³⁾	1987-50-4 Linear chain	217-862-0 Linear chain	0.004	N.D.
171	Nonadecafluorodecanoic acid and its sodium and ammonium salts ⁽³⁾	335-76-2 3830-45-3 3108-42-7	206-400-3 — 221-470-5	0.005	N.D.
172	p-(1,1-dimethylpropyl)phenol	80-46-6	201-280-9	0.004	N.D.
173	4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8	0.012	N.D.
174	Perfluorohexane-1-sulphonic acid and its salts	355-46-4	206-587-1	0.005	N.D.

Note: DL = Detection Limit

N.D. = Not Detected (<DL)

0.1 % = 1000 mg/kg = 1000 ppm

(1): PBT=Persistent, bioaccumulative and toxic; vPvB=very Persistent very Bioaccumulative
Concentration value of Cobalt dichloride is by the conversion from the test results of Cobalt and Chlorine. Concentration value of Cobalt(II) sulphate, Cobalt(II) dinitrate, Cobalt(II) carbonate, Cobalt(II) diacetate are by the conversion from the test results of Cobalt and Acid. Concentration value of Triethyl arsenate, Diarsenic pentoxide, Diarsenic trioxide, Sodium dichromate, Lead hydrogen arsenate, Chromium trioxide, 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), Strontium chromate, Boric acid, Disodium Tetraborate. Anhydrous, Tetraboron disodium heptaoxide, hydrate, Sodium chromate, Potassium chromate, Potassium dichromate, Ammonium dichromate, Dichromium tris(chromate), Potassium hydroxyoctaoxidizincatedichromate, Arsenic acid, Calcium arsenate, Trilead diarsenate, Lead diazide, Lead azide, Lead styphnate, Lead dipicrate, Diboron trioxide, Lead(II) bis(methanesulfonate), Acetic acid, lead salt, basic, Trilead bis(carbonate)dihydroxide, Lead oxide sulphate, Lead bis(tetrafluoroborate), Lead cyanamide, Lead dinitrate, Lead monoxide (lead oxide), Orange lead (lead tetroxide), Lead titanium trioxide, Lead titanium zirconium oxide, Pentalead tetraoxide sulphate, Pyrochlore, antimony lead yellow, Sulfurous acid, lead salt, Silicic acid, lead salt, Sulfurous acid, lead salt, dibasic, Tetralead trioxide sulphate, Trilead dioxide phosphonate, Tetraethyllead, [Phthalato(2-)]dioxotrilead, Dioxobis(stearato)trilead, Fatty acids, C16-18, lead salts, Cadmium oxide, Cadmium sulphide, Lead di(acetate), Sodium perborate; perboric acid, sodium salt, Sodium peroxometaborate, Cadmium chloride, Cadmium fluoride, Cadmium sulphate, Perfluorononan-1-oic-acid and its sodium and ammonium salts are by the conversion from the test results of corresponding Inorganic elements.

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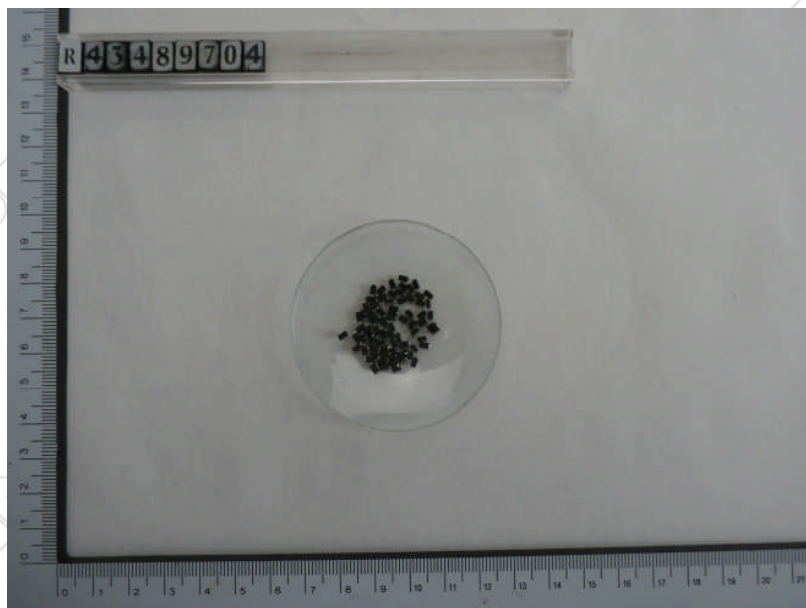
(SVHC)

- (2): In view of the substances are established as UVCB substances (substances of unknown or variable composition, complex reaction products or biological materials) consisting of different and variable constituents, the test results are calculated based on the main constituents of the representative compounds for substances.
- (3): when tested substances contain variable compounds, the test results are calculated based on main constituents of the representative compounds for the substances. The test results of the representative compounds are calculated based on the result of specified heavy metal elements.
- (4): TGIC is a mixture and also contains β -TGIC. According to the ECHA's technical dossier the ratio of β -TGIC to TGIC is around 1 to 10. Therefore β -TGIC is issued based on the above-mentioned ratio.

Remarks:

1. The chemical analysis of 174 SVHC is performed by means of currently available analytical Techniques in the list published by ECHA on 28 Oct 2008, 13 Jan 2010, 30 Mar 2010, 18 Jun 2010, 15 Dec 2010, 20 June 2011, 19 Dec 2011, 18 Jun 2012, 19 Dec 2012, 20 Jun 2013, 16 Dec 2013, 16 Jun 2014, 17 Dec 2014, 15 Jun 2015, 17 Dec 2015, 20 Jun 2016, 19 Dec 2016 and 16 Jun 2017 shall refer to <http://echa.europa.eu/web/guest/candidate-list-table>
2. In accordance with Regulation (EC) No 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w).
3. Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the Name of that substance.
4. The mixing sample test was performed as client's request. Result obtained only gives informality value and does not represent individual sample material.

Sample No. & Photo:



Pony authenticate the photo on original report only

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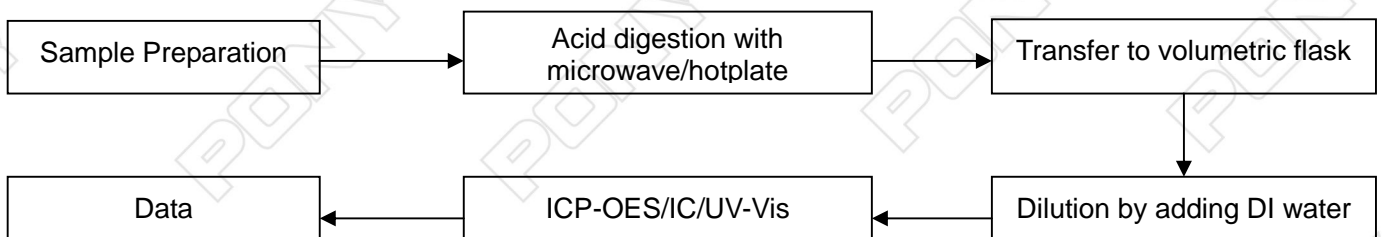
Measurement Flow-chart

Tested by: Li Yufeng

Checked by: Lv Yuanlin

Person in charge of the lab: Gao Shenxia

1. Determination of Cobalt dichloride/ Diarsenic pentaoxide/ Diarsenic trioxide/Sodium dichromate/ Lead hydrogen arsenate/ Triethyl arsenate/Lead chromate/ Lead chromate molybdate sulphate red (C.I. Pigment Red 104)/ Lead sulfochromate yellow(C.I. Pigment Yellow 34) / Boric acid/ Disodium tetraborate, anhydrous/ Tetraboron disodium heptaoxide, hydrate/ Sodium chromate/ Potassium chromate/ Ammonium dichromate/Potassium dichromate/ Cobalt(II) sulphate / Cobalt(II) dinitrate / Cobalt(II) carbonate/Cobalt(II) diacetate/ 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)/ Strontium chromate/Hydrazine/ Dichromium tris(chromate)/ Potassium hydroxyoctaoxidizincatedichromate/ Pentazinc chromate octahydroxide/Aluminosilicate Refractory Ceramic Fibres (RCF)/Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)/ Arsenic acid/ Calcium arsenate/ Trilead diarsenate/Lead diazide, Lead azide/ Lead styphnate/Lead dipicrate/ Diboron trioxide/ Lead(II) bis(methanesulfonate)/ Acetic acid, lead salt, basic/ Trilead bis(carbonate)dihydroxide/ Lead oxide sulphate/Lead bis(tetrafluoroborate)/Lead cyanamate/Lead dinitrate/Lead monoxide (lead oxide)/Orange lead (lead tetroxide)/Lead titanium trioxide/Lead titanium zirconium oxide/ Pentalead tetraoxide sulphate/ Pyrochlore, antimony lead yellow/ Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped /Silicic acid, lead salt/Sulfurous acid, lead salt, dibasic/Tetralead trioxide sulphate/ Trilead dioxide phosphonate/ Tetraethyllead/[Phthalato(2-)]dioxotrilead/ Dioxobis(stearato)trilead / Fatty acids, C16-18, lead salts/ Cadmium/ Cadmium oxide/ Cadmium sulphide/ Lead di(acetate)/ Sodium perborate; perboric acid, sodium salt/ Sodium peroxometaborate/ Cadmium chloride/ Determination of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) / 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) / cadmium fluoride/ cadmium sulphate



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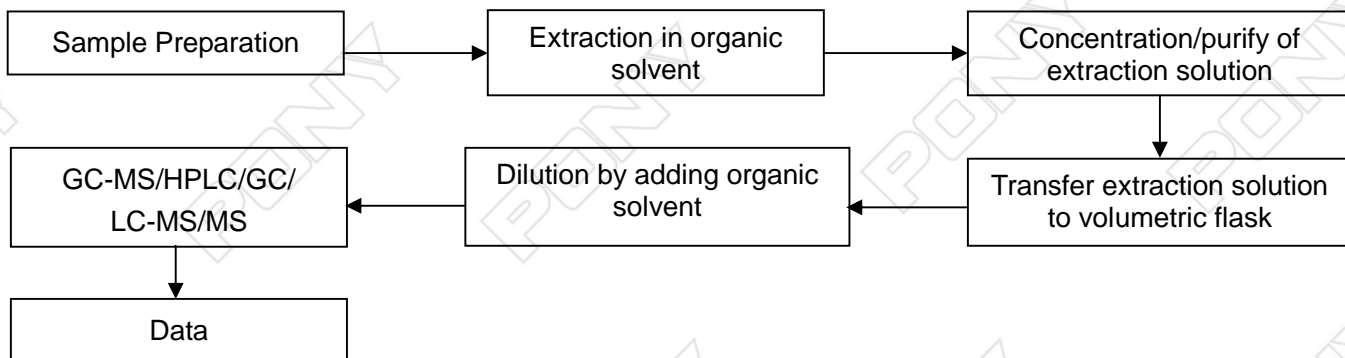
Measurement Flow-chart

Tested by: Yang Mingjin

Checked by: Lv Yuanlin

Person in charge of the lab: Gao Shenxia

2. Determination of Anthracene/ 4,4'- Diaminodiphenylmethane (MDA)/ 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)/ Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane / Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) / Bis(tributyltin)oxide(TBTO)/ Benzyl butyl phthalate (BBP)/ Bis (2-ethylhexyl)phthalate (DEHP)/ Dibutyl phthalate (DBP) / Anthracene oil/ Anthracene oil, anthracene paste,distn. lights/ Anthracene oil, anthracene paste, anthracene fraction/ Anthracene oil, anthracene-low/ Anthracene oil, anthracene paste/ Diisobutyl phthalate/ Acrylamide/ 2,4-Dinitrotoluene/ Tris(2-chloroethyl)phosphate/ Pitch, coal tar, high temp./ Trichloroethylene/ 2-Methoxyethanol /2-Ethoxyethanol /2-Ethoxyethyl acetate/ 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters /1-Methyl-2-pyrrolidone/1,2,3-Trichloropropane/ 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich/ Bis(2-methoxyethyl) phthalate/2-Methoxyaniline; o-Anisidine/4-(1,1,3,3-tetramethylbutyl)phenol/ 1,2-dichloroethane/ Bis(2-methoxyethyl) ether/ N,N-dimethylacetamide/Phenolphthalein/ 2,2'-dichloro-4,4'-methylenedianiline/ 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)/ 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)/ Formamide/ 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)/ 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC)/ 4,4'-bis(dimethylamino) benzophenone (Michler's ketone)/ N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)/ [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)/ [4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl] methylene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26)/ α,α -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I.Solvent Blue 4)/ 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol



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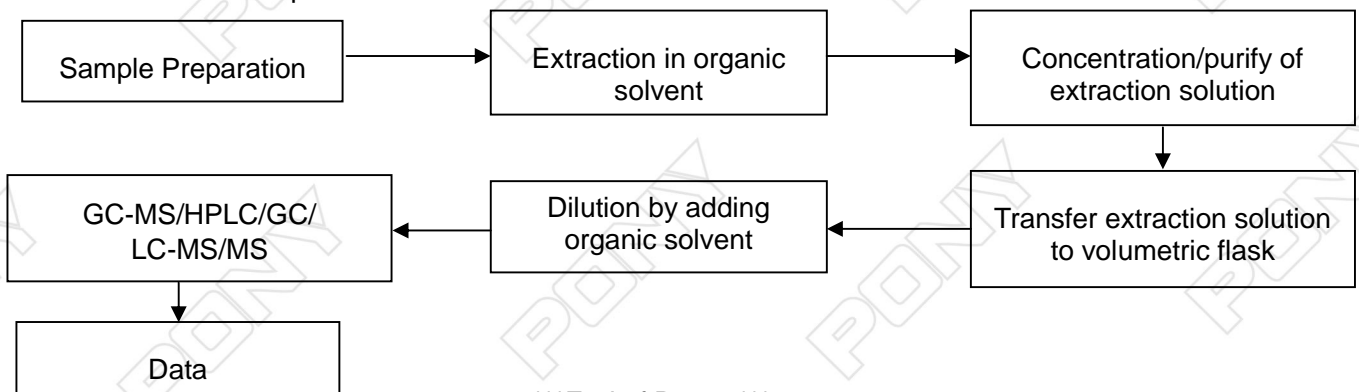
Measurement Flow-chart

Tested by: Yang Mingjin

Checked by: Lv Yuanlin

Person in charge of the lab: Gao Shenxia

3. 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated/ 4-Nonylphenol, branched and linear/ Diazene-1, 2-dicarboxamide (C,C'-azodi(formamide))/ Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1, 2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride / Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride/ Methoxyacetic acid/ 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear/ Diisopentylphthalate/ N-pentyl-isopentylphthalate/ 1,2-Diethoxyethane/ N,N-dimethylformamide /Dibutyltin dichloride (DBTC)/ [Phthalato(2-)]dioxotrilead/ Dioxobis(stearato)trilead/ Fatty acids, C16-18, lead salts/ Tetraethyllead/ Furan/ Methyloxirane (Propylene oxide)/ Diethyl sulphate/ Dimethyl sulphate/ Dinoseb (6-sec-butyl-2,4-dinitrophenol)/ 4,4'-methylenedi-o-toluidine/ 4,4'-oxydianiline and its salts/ 4-Aminoazobenzene/ 4-methyl-m-phenylenediamine (toluene-2,4-diamine)/ 6-methoxy-m-toluidine (p-cresidine)/ Biphenyl-4-ylamine/ o-aminoazotoluene/ o-Toluidine/ N-methylacetamide/1-bromopropane (n-propyl bromide) / 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine/ Dipentyl phthalate (DPP)/ 4-Nonylphenol, branched and linear, ethoxylated/ Ammonium pentadecafluorooctanoate (APFO)/ Pentadecafluorooctanoic acid (PFOA)/ 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)/ Dihexyl phthalate/ Imidazolidine-2-thione; (2-imidazoline-2-thiol)/ Trixylyl phosphate/Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)/ 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear/ Determination of 2-benzotriazol-2-yl-4, 6-di-tert-butylphenol (UV-320) / 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)/ 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)/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] / 1,3-propanesultone/ 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)/ 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)/ Nitrobenzene/ Perfluorononan-1-oic-acid and its sodium and ammonium salts/Benzo[def]chrysene(Benzo[a]pyrene) / 4-Heptylphenol, branched and linear/Nonadecafluorodecanoic acid and its sodium and ammonium salts/ p-(1,1-dimethylpropyl)phenol/4,4'-isopropylidenediphenol (Bisphenol A, BPA)/ Perfluorohexane-1-sulphonic acid and its salts



End of Report