



Test Report No. F690101/LF-CTSAYAA23-05017

Issued Date : 2023. 01. 31

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PLAVEX CORPORATION CO., LTD.

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Korea

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

SGS File No. : AYAA23-05017
Product Name : Arystal PMMA
Item No./Part No. : N/A
Received Date : 2023. 01. 20
Test Period : 2023. 01. 20 to 2023. 01. 31
Test Requested : As requested by client, SVHC screening is performed according to:
- Two hundred and thirty three (233) substances in the Candidate List of Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on January 17, 2023 regarding Regulation (EC) No 1907/2006 concerning the REACH.
Test Method : Please refer to next page(s).
Test Result(s) Summary : Please refer to next page(s).
According to the specified scope and evaluation screening, the test results of SVHC are $\leq 0.1\%$ (w/w) in the articles of the submitted sample.

SGS Korea Co., Ltd.

Tommy Oh / Chemical Lab Mgr

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Test Method :

SGS In-House method - Analyzed by ICP-OES, PLM, UV/VIS, LC/MS, GC/MS and colorimetric method

Remarks :

1. The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA:

<https://echa.europa.eu/candidate-list-table> (Candidate list)

https://echa.europa.eu/proposals-to-identify-substances-of-very-high-concern-previous-consultations?p_p_id=substancetypepelist_WAR_substanceportlet&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_pos=2&p_p_col_count=4&substancetypepelis

(Proposals to identify SVHC consultations)

The lists are under evaluation by ECHA and may subject to change in the future .

2. In accordance with Regulation (EC) No 1907/2006, any EU 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 in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List 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 in the Candidate List.

4. If a SVHC is found over 0.1% (w/w), client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
1	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	0.05	N.D.
2	Anthracene	120-12-7	204-371-1	0.05	N.D.
3	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7	0.05	N.D.
4	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	204-211-0	0.05	N.D.
5	Bis(tributyltin)oxide (TBTO)	56-35-9	200-268-0	0.05	N.D.
6	Cobalt dichloride*	7646-79-9	231-589-4	0.005	N.D.
7	4,4-Diaminodiphenylmethane	101-77-9	202-974-4	0.05	N.D.
8	Diarsenic pentaoxide*	1303-28-2	215-116-9	0.005	N.D.
9	Diarsenic trioxide*	1327-53-3	215-481-4	0.005	N.D.
10	Dibutyl phthalate (DBP)	84-74-2	201-557-4	0.05	N.D.
11	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD)	25637-99-4; 3194-55-6 (134237-51-7; 134237-50-6; 134237-52-8)	247-148-4; 221-695-9	0.05	N.D.
12	Lead hydrogen arsenate*	7784-40-9	232-064-2	0.005	N.D.
13	Sodium dichromate*(Sodium dichromate dehydrate)	10588-01-9, (7789-12-0)	234-190-3	0.005	N.D.
14	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	0.05	N.D.
15	Triethyl arsenate*	15606-95-8	427-700-2	0.005	N.D.
16	Di-isobutyl phthalate(DIBP)	84-69-5	201-553-2	0.05	N.D.
17	2,4-Dinitrotoluene	121-14-2	204-450-0	0.05	N.D.
18	Tris(2-chloroethyl) phosphate	115-96-8	204-118-5	0.05	N.D.
19	Anthracene oil*	90640-80-5	292-602-7	0.05	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
20	Anthracene oil, anthracene paste; distn. Lights*	91995-17-4	295-278-5	0.05	N.D.
21	Anthracene oil, anthracene paste, anthracene fraction*	91995-15-2	295-275-9	0.05	N.D.
22	Anthracene oil, anthracene-low*	90640-82-7	292-604-8	0.05	N.D.
23	Anthracene oil, anthracene paste*	90640-81-6	292-603-2	0.05	N.D.
24	Coal tar pitch, high temperature*	65996-93-2	266-028-2	0.05	N.D.
25	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	215-693-7	0.005	N.D.
26	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	235-759-9	0.005	N.D.
27	Lead chromate*	7758-97-6	231-846-0	0.005	N.D.
28	Acrylamide	79-06-01	201-173-7	0.05	N.D.
29	Boric acid*	10043-35-3, 111 13-50-1	233-139-2, 234- 343-4	0.005	N.D.
30	Disodium tetraborate, anhydrous*	1330-43-4, 12179-04-3, 1303-96-4	215-540-4	0.005	N.D.
31	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3	0.005	N.D.
32	Trichloroethylene	79-01-6	201-167-4	0.05	N.D.
33	Sodium chromate*	7775-11-3	231-889-5	0.005	N.D.
34	Ammonium dichromate*	7789-9-5	232-143-1	0.005	N.D.
35	Potassium dichromate*	7778-50-9	231-906-6	0.005	N.D.
36	Potassium chromate*	7789-00-6	232-140-5	0.005	N.D.
37	Cobalt(II) sulphate*	10124-43-3	233-334-2	0.005	N.D.
38	Cobalt(II) dinitrate*	10141-05-6	233-402-1	0.005	N.D.
39	Cobalt(II) carbonate*	513-79-1	208-169-4	0.005	N.D.

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No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
40	Cobalt(II) diacetate*	71-48-7	200-755-8	0.005	N.D.
41	2-Methoxyethanol	109-86-4	203-713-7	0.05	N.D.
42	2-Ethoxyethanol	110-80-5	203-804-1	0.05	N.D.
43	Chromium trioxide*	1333-82-0	215-607-8	0.005	N.D.
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, -	231-801-5, 236-881-5, -	0.005	N.D.
45	1-methyl-2-pyrrolidone	872-50-4	212-828-1	0.05	N.D.
46	2-ethoxyethyl acetate	111-15-9	203-839-2	0.05	N.D.
47	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1	0.05	N.D.
48	1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6	0.05	N.D.
49	1,2,3-trichloropropane	96-18-4	202-486-1	0.05	N.D.
50	Hydrazine	7803-57-8; 302-01-2	206-114-9	0.05	N.D.
51	Strontium chromate*	7789-06-2	232-142-6	0.005	N.D.
52	1,2-Dichloroethane	107-06-2	203-458-1	0.05	N.D.
53	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9	0.05	N.D.
54	2-Methoxyaniline o-Anisidine	90-04-0	201-963-1	0.05	N.D.
55	4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol)	140-66-9	205-426-2	0.05	N.D.
56	Aluminosilicate Refractory Ceramic Fibres* (RCF)	650-017-00-8 (Index no.)		0.005	N.D.
57	Arsenic acid*	7778-39-4	231-901-9	0.005	N.D.
58	Bis(2-methoxyethyl) ether	111-96-6	203-924-4	0.05	N.D.
59	Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	0.05	N.D.
60	Calcium arsenate*	7778-44-1	231-904-5	0.005	N.D.
61	Dichromium tris(chromate)*	24613-89-6	246-356-2	0.005	N.D.

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No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
62	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	500-036-1	0.05	N.D.
63	Lead diazide*	13424-46-9	236-542-1	0.005	N.D.
64	Lead dipicrate*	6477-64-1	229-335-2	0.005	N.D.
65	Lead styphnate*	15245-44-0	239-290-2	0.005	N.D.
66	N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4	0.05	N.D.
67	Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	0.005	N.D.
68	Phenolphthalein	77-09-8	201-004-7	0.05	N.D.
69	Potassium hydroxyocta-oxodizincatedichromate*	11103-86-9	234-329-8	0.005	N.D.
70	Trilead diarsenate*	3687-31-8	222-979-5	0.005	N.D.
71	Zirconia Aluminosilicate, Refractory Ceramic Fibers (Zr-RCF)*	650-017-00-8 (Index no.)	-	0.005	N.D.
72	1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2	203-977-3	0.05	N.D.
73	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	0.05	N.D.
74	Diboron trioxide*	1303-86-2	215-125-8	0.005	N.D.
75	Formamide	75-12-7	200-842-0	0.05	N.D.
76	Lead(II) bis(methanesulfonate)*	17570-76-2	401-750-5	0.005	N.D.
77	TGIC(1,3,5-tris (oxiranyl methyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	219-514-3	0.05	N.D.
78	β -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	423-400-0	0.05	N.D.
79	4,4'-bis(dimethylamino) benzophenone (Michler's ketone)	90-94-8	202-027-5	0.05	N.D.
80	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2	0.05	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	0.05	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	0.05	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
83	α,α -Bis[4-(dimethylamino) phenyl]-4 (phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	229-851-8	0.05	N.D.
84	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	209-218-2	0.05	N.D.
85	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9	0.05	N.D.
86	Pentacosafuorotridecanoic acid	72629-94-8	276-745-2	0.05	N.D.
87	Tricosafuorododecanoic acid	307-55-1	206-203-2	0.05	N.D.
88	Henicosafuoroundecanoic acid	2058-94-8	218-165-4	0.05	N.D.
89	Heptacosafuorotetradecanoic acid	376-06-7	206-803-4	0.05	N.D.
90	4-(1,1,3,3-tetramethylbutyl) phenol, ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues	-	-	0.05	N.D.
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	-	-	0.05	N.D.
92	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	0.05	N.D.
93	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7; 13149-00-3; 14166-21-3	201-604-9; 236-086-3; 238-009-9	0.05	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	0.05	N.D.
95	Methoxy acetic acid	625-45-6	210-894-6	0.05	N.D.
96	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2	0.05	N.D.
97	Diisopentylphthalate (DIPP)	605-50-5	210-088-4	0.05	N.D.

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No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
98	N-pentyl-isopentylphthalate	-	-	0.05	N.D.
99	1,2-Diethoxyethane	629-14-1	211-076-1	0.05	N.D.
100	N,N-dimethylformamide; dimethyl formamide	68-12-2	200-679-5	0.05	N.D.
101	Dibutyltin dichloride (DBT)	683-18-1	211-670-0	0.05	N.D.
102	Acetic acid, lead salt, basic*	51404-69-4	257-175-3	0.005	N.D.
103	Basic lead carbonate (trilead bis(carbonate)dihydroxide)*	1319-46-6	215-290-6	0.005	N.D.
104	Lead oxide sulfate (basic lead sulfate)*	12036-76-9	234-853-7	0.005	N.D.
105	[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)*	69011-06-9	273-688-5	0.005	N.D.
106	Dioxobis(stearato)trilead*	12578-12-0	235-702-8	0.005	N.D.
107	Fatty acids, C16-18, lead salt*	91031-62-8	292-966-7	0.005	N.D.
108	Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	0.005	N.D.
109	Lead cyanamidate*	20837-86-9	244-073-9	0.005	N.D.
110	Lead dinitrate*	10099-74-8	233-245-9	0.005	N.D.
111	Lead oxide (lead monoxide)*	1317-36-8	215-267-0	0.005	N.D.
112	Lead tetroxide (orange lead)*	1314-41-6	215-235-6	0.005	N.D.
113	Lead titanium trioxide*	12060-00-3	235-038-9	0.005	N.D.
114	Lead Titanium Zirconium Oxide*	12626-81-2	235-727-4	0.005	N.D.
115	Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	0.005	N.D.
116	Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	0.005	N.D.
117	Silicic acid, barium salt, lead-doped*	68784-75-8	272-271-5	0.005	N.D.
118	Silicic acid, lead salt*	11120-22-2	234-363-3	0.005	N.D.
119	Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	0.005	N.D.
120	Tetraethyllead*	78-00-2	201-075-4	0.005	N.D.
121	Tetralead trioxide sulphate*	12202-17-4	235-380-9	0.005	N.D.
122	Trilead dioxide phosphonate*	12141-20-7	235-252-2	0.005	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
123	Furan	110-00-9	203-727-3	0.05	N.D.
124	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2	0.05	N.D.
125	Diethyl sulphate	64-67-5	200-589-6	0.05	N.D.
126	Dimethyl sulphate	77-78-1	201-058-1	0.05	N.D.
127	3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7	0.05	N.D.
128	Dinoseb	88-85-7	201-861-7	0.05	N.D.
129	4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	0.05	N.D.
130	4,4'-oxydianiline and its salts	101-80-4	202-977-0	0.05	N.D.
131	4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3	200-453-6	0.05	N.D.
132	4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	202-453-1	0.05	N.D.
133	6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1	0.05	N.D.
134	Biphenyl-4-ylamine	92-67-1	202-177-1	0.05	N.D.
135	o-aminoazotoluene	97-56-3	202-591-2	0.05	N.D.
136	o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0	0.05	N.D.
137	N-methylacetamide	79-16-3	201-182-6	0.05	N.D.
138	1-bromopropane; n-propyl bromide	106-94-5	203-445-0	0.05	N.D.
139	Cadmium	7440-43-9	231-152-8	0.005	N.D.
140	Cadmium oxide*	1306-19-0	215-146-2	0.005	N.D.
141	Dipentyl phthalate (DPP)	131-18-0	205-017-9	0.05	N.D.
142	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]	-	-	0.05	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4	0.05	N.D.
144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9	0.05	N.D.
145	Dihexyl phthalate	84-75-3	201-559-5	0.05	N.D.
146	Trixylyl phosphate	25155-23-1	246-677-8	0.05	N.D.
147	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	202-506-9	0.05	N.D.
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	217-710-3	0.05	N.D.
149	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	0.05	N.D.
150	Cadmium sulphide*	1306-23-6	215-147-8	0.005	N.D.
151	Lead di(acetate)*	301-04-2	206-104-4	0.005	N.D.
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5	0.05	N.D.
153	Cadmium chloride*	10108-64-2	233-296-7	0.005	N.D.
154	Sodium perborate*; perboric acid, sodium salt*	-	239-172-9, 234-390-0	0.005	N.D.
155	Sodium peroxometaborate*	7632-04-4	231-556-4	0.005	N.D.
156	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6	0.05	N.D.
157	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	0.05	N.D.
158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	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)	-	-	0.05	N.D.
160	Cadmium fluoride*	7790-79-6	232-222-0	0.005	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
161	Cadmium sulphate*	10124-36-4, 31119-53-6	233-331-6	0.005	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)	68515-51-5; 68648-93-1	271-094-0; 272-013-1	0.05	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 isomers of [1] and [2] or any combination thereof]	-	-	0.05	N.D.
164	1,3-propanesultone	1120-71-4	214-317-9	0.05	N.D.
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	0.05	N.D.
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	0.05	N.D.
167	Nitrobenzene	98-95-3	202-716-0	0.05	N.D.
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptafluorononanoic acid and its sodium and ammonium salts	375-95-1; 21049-39-8; 4149-60-4	206-801-3	0.05	N.D.
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	0.05	N.D.
170	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	201-245-8	0.05	N.D.
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]	-	-	0.05	N.D.
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7; 335-76-2; 3830-45-3	-, 206-400-3; 221-470-5	0.05	N.D.
173	p-(1,1-dimethylpropyl)phenol	80-46-6	201-280-9	0.05	N.D.
174	Perfluorohexane-1-sulphonic acid and its salts	355-46-4	206-587-1	0.05	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
175	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 TM) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	-	0.05	N.D.
176	Benz[a]anthracene	56-55-3	200-280-6	0.05	N.D.
177	Cadmium nitrate*	10325-94-7	233-710-6	0.005	N.D.
178	Cadmium carbonate*	513-78-0	208-168-9	0.005	N.D.
179	Cadmium hydroxide*	21041-95-2	244-168-5	0.005	N.D.
180	Chrysene	218-01-9	205-923-4	0.05	N.D.
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]	-	-	0.05	N.D.
182	Benzo[ghi]perylene (BgP)	191-24-2	205-883-8	0.05	N.D.
183	Decamethylcyclopentasiloxane (D5)	541-02-6	208-764-9	0.05	N.D.
184	Disodium Octaborate*	12008-41-2	234-541-0	0.005	N.D.
185	Dodecamethylcyclohexasiloxane (D6)	540-97-6	208-762-8	0.05	N.D.
186	Ethylenediamine	107-15-3	203-468-6	0.05	N.D.
187	Lead	7439-92-1	231-100-4	0.005	N.D.
188	Octamethylcyclotetrasiloxane (D4)	556-67-2	209-136-7	0.05	N.D.
189	Terphenyl hydrogenated	61788-32-7	262-967-7	0.05	N.D.
190	Dicyclohexyl phthalate(DCHP)	84-61-7	201-545-9	0.05	N.D.
191	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride; TMA)	552-30-7	209-008-0	0.05	N.D.
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	401-720-1	0.05	N.D.
193	Benzo[k]fluoranthene	207-08-9	205-916-6	0.05	N.D.
194	Fluoranthene	206-44-0	205-912-4	0.05	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
195	Phenanthrene	85-01-8	201-581-5	0.05	N.D.
196	Pyrene	129-00-0	204-927-3	0.05	N.D.
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	239-139-9	0.05	N.D.
198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	-	0.05	N.D.
199	2-methoxyethyl acetate	110-49-6	203-772-9	0.05	N.D.
200	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	-	0.05	N.D.
201	4-tert-Butylphenol	98-54-4	202-679-0	0.05	N.D.
202	2-benzyl-2-dimethylamino-4'-morpholinobutyrophe none	119313-12-1	404-360-3	0.05	N.D.
203	2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	400-600-6	0.05	N.D.
204	Diisohexyl phthalate	71850-09-4	276-090-2	0.05	N.D.
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	0.05	N.D.
206	1-vinylimidazole	1072-63-5	214-012-0	0.05	N.D.
207	2-methylimidazole	693-98-1	211-765-7	0.05	N.D.
208	Butyl 4-hydroxybenzoate	94-26-8	202-318-7	0.05	N.D.
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4	245-152-0	0.05	N.D.
210	bis(2-(2-methoxyethoxy)ethyl) ether	143-24-8	205-594-7	0.05	N.D.
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	-	-	0.05	N.D.

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Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
212	1,4-dioxane	123-91-1	204-661-8	0.05	N.D.
213	2,2-bis(bromomethyl)propane 1,3-diol (BMP) 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propa nol (TBNPA) 2,3-dibromo-1-propanol (2,3-DBPA)	-	-	0.05	N.D.
214	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-	-	0.05	N.D.
215	4,4'-(1-methylpropylidene)bisphenol; (bisphenol B)	77-40-7	201-025-1	0.05	N.D.
216	Glutaral	111-30-8	203-856-5	0.05	N.D.
217	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]	-	-	0.05	N.D.
218	Orthoboric Acid, sodium salt*	-	-	0.005	N.D.
219	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	-	0.05	N.D.
220	(±)-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)	-	-	0.05	N.D.
221	6,6'-Di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)	119-47-1	204-327-1	0.05	N.D.
222	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*	255881-94-8	401-850-9	0.05	N.D.
223	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	213-934-0	0.05	N.D.
224	N-(hydroxymethyl)acrylamide	924-42-5	213-103-2	0.05	N.D.
225	1,1'- [ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	37853-59-1	253-692-3	0.05	N.D.
226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	201-236-9	0.05	N.D.

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No.	Substance Name	CAS number	EC number	Reporting Limit(%)	Concentration (%)
227	4,4'-sulphonyldiphenol	80-09-1	201-250-5	0.05	N.D.
228	Barium diboron tetraoxide*	13701-59-2	237-222-4	0.005	N.D.
229	Bis(2-ethylhexyl) tetrabromophthalate	26040-51-7	247-426-5	0.05	N.D.
230	Isobutyl 4-hydroxybenzoate	4247-02-3	224-208-8	0.05	N.D.
231	Melamine	108-78-1	203-615-4	0.05	N.D.
232	Perfluoroheptanoic acid and its salts	375-85-9/6130-43-4/201049-36-5/20109-59-5	206-798-9/228-098-2/701-468-5/243-518-4	0.05	N.D.
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 (FC-770)*	-	473-390-7	0.05	N.D.

Note :

1. RL = Reporting Limit, 0.05% (w/w) = 500 ppm = 500 mg/kg, 0.005% (w/w) = 50 ppm = 50 mg/kg

2. N.D. = Not detected (< RL)

N.A. = Not applicable for respective material type.

The submitted sample was found to contain significant amount of specific element(s) of SVHC. Upon further test verification and also information provided from client, the possibility that the element(s) content originate from SVHC is very unlikely, even though their presence cannot be exclude entirely. It may be assumed that the detected element(s) have a non-SVHC source.

3. *.The test result is based on the calculation of selected element(s) / marker(s) and to the worst-case scenario.

For detail information, please refer to the SGS REACH website:

www.reach.sgs.com/substance-of-very-high-concern-analysis-information-page.htm

The client is advised to review the chemical formulation to ascertain above metal substances present in the article.

RL = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, sodium, chromium, chromium(VI), silicon, aluminum, zirconium, boron, and potassium respectively), except molybdenum RL=0.0005%

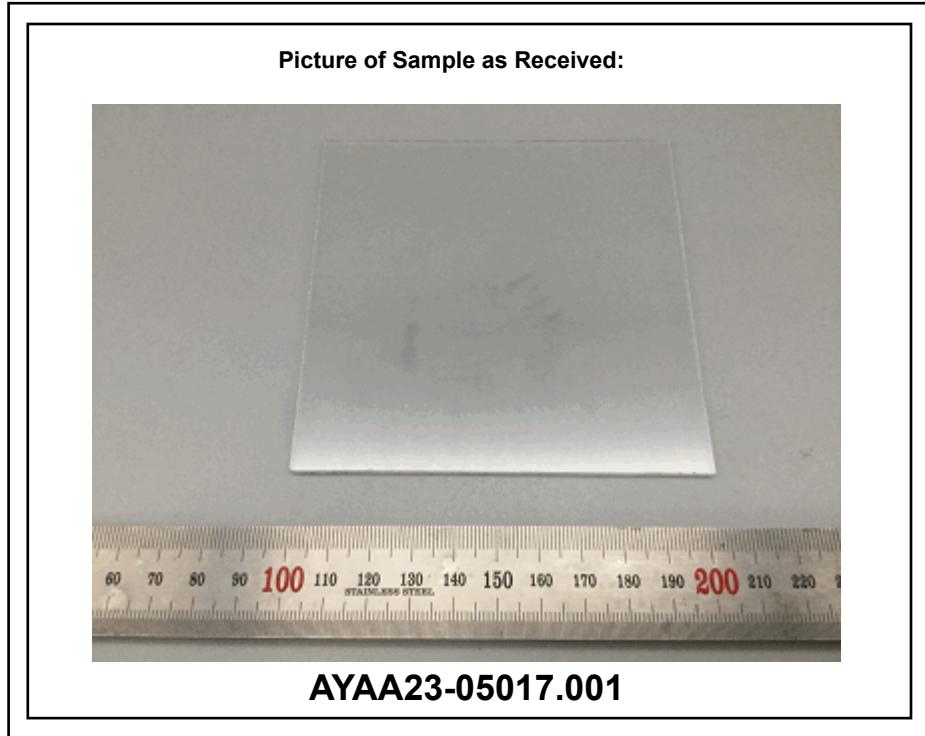
4. **.b-TGIC is one of the isomers for TGIC compounds and hence, tested together. The reported test result is based the proposed ratio as according to ECHA dossier.

5. ***.The sample was diluted with solvent because of matrix effect, so there could be slight increase in MDL and it may have an effect on RL.

6. The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

7. This test report is not related to Korea Laboratory Accreditation Scheme .

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*** End of Report ***

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