

Issued Date: 2018. 01. 16. Page 1 of 17

LEMON CO., LTD. 1105-65 Sanho-daero, Sandong-myeon Gumi-si, Gyeongbuk Korea



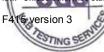
The following sample(s) was/were submitted and identified by/on behalf of the client as:-

SGS File No.	: AYGA18-00327
Product Name	: Nano membrane (sanitary pad)
Item/Part Name	: N/A
Received Date	: 2018.01.09
Test Period	: 2018. 01. 09. ~ 2018. 01. 16.
Test Requested	: One hundred-Seventy four (174) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on July 7, 2017 regarding Regulation (EC) No 1907/2006 concerning the REACH.
	Eight (8) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on Sep 5, 2017 regarding Regulation (EC) No 1907/2006 concerning the REACH.
Test Method	: Please refer to next page(s).
Test Result(s)	: Please refer to next page(s).
Summary	 According to the specified scope and evaluation screening, the test results of SVHC are ≤ 0.1% (w/w) in the articles of the submitted sample.

SGS Korea Co., Ltd

Jeff Jang / Chemical Lab Mgr

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-conditions.space and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the fine of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).





Test Method:

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

Remarks:

The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA:
 http://echa.europa.eu/web/guest/candidate-list-table (Candidate list)
 <a href="http://echa.europa.eu/proposals-to-identify-substances-of-very-high-concern-previous-consultations?ppid=substancetypelist_WAR_substanceportlet&pplifecycle=0&ppstate=normal&ppmode=view&ppcol_id=column-1&pp_col_pos=2&ppcol_count=4& substancetypelis
 (Proposals to identify SVHC consultations)

This list is under evaluation by ECHA and may subject to change in the future.

- 2. In accordance with Regulation (EC) No 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 2 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 in the Candidate List.
- 4. If a SVHC is found over the reporting limit, 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions for Electronic formatications">http://www.sgs.com/en/Terms-a



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	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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 4 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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.
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 sulfate 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 11113-50-1	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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

SGS Korea Co., Ltd



Issued Date: 2018. 01. 16. Page 5 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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*	7789-09-5	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.
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.
	Acids generated from chromium trioxide and their oligomers:				
44	Chromic acid Dichromic acid	7738-94-5 13530-68-2 -	231-801-5 236-881-5 -	0.005	N.D.
	Oligomers of chromic acid and dichromic acid*				

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 6 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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-branced 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 7 of 17

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 Fibres (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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

SGS Korea Co., Ltd



Issued Date: 2018. 01. 16. Page 8 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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]cy clohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	219-943-6	0.05	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	0.05	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	Pentacosafluorotridecanoic acid	72629-94-8	276-745-2	0.05	N.D.
87	Tricosafluorododecanoic acid	307-55-1	206-203-2	0.05	N.D.
88	Henicosafluoroundecanoic acid	2058-94-8	218-165-4	0.05	N.D.
89	Heptacosafluorotetradecanoic 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 9 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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	Hexahydromethylphathalic anhydride, Hexahydro-4- methylphathalic anhydride, Hexahydro-1-methylphathalic anhydride, Hexahydro-3- methylphathalic 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.
98	N-pentyl-isopentylphtalate	-	-	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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 10 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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 salts*	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.

SGS Korea Co., Ltd

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 11 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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.
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.

SGS Korea Co., Ltd

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 12 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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.
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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 13 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

SGS Korea Co., Ltd



Issued Date: 2018. 01. 16. Page 14 of 17

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 \geq 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- heptadecafluorononanoic 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Issued Date: 2018. 01. 16. Page 15 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

SGS Korea Co., Ltd



Issued Date: 2018. 01. 16. Page 16 of 17

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 PlusTM) [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	Tricobalt tetraoxide containing ≥ 0.1% w/w nickel oxides	1308-06-1	215-157-2	0.005	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

SGS Korea Co., Ltd



Note:

- 1. RL = Reporting Limit, 0.1% (w/w) = 1,000 ppm = 1,000 mg/kg
- 2. N.D. = Not detected (lower than 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.

 *.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: <u>www.reach.sgs.com/substance-of-very-high-concern-analysis-information-page.htm</u>

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. **. -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.



*** End of Report ***

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/en/Terms-e-document.htm. Attraction is drawn to the limits of on and jurisdiction is drawn to the fit intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).