



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 1 of 17

CLEAN CU

108, Heungdo-ro, Deogyang-gu
Goyang-si, Gyeonggi-do
Korea

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

SGS File No.	: AYHA20-06269
Product Name	: CleanCU Anti Germ PE (film sheet_C.C)
Item/Part Name	: N/A
Received Date	: 2020. 06. 05
Test Period	: 2020. 06. 05 ~ 2020. 06. 12
Test Requested	: Two hundred and five (205) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on January 16, 2020 regarding Regulation (EC) No 1907/2006 concerning the REACH. Five (5) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on March 3, 2020 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 $\leq 0.1\%$ (w/w) in the articles of the submitted sample.

SGS Korea Co., Ltd

Tommy Oh / 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.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

CQP-7081-F10 (01)

SGS Korea Co., Ltd. 322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 2 of 17

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:
<http://echa.europa.eu/web/guest/candidate-list-table> (Candidate list)
http://echa.europa.eu/proposals-to-identify-substances-of-very-high-concern-previous-consultations?p_p_id=substancetypelist_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&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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

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.
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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 4 of 17

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

CQP-7081-F10 (01)

SGS Korea Co., Ltd.

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 5 of 17

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

CQP-7081-F10 (01)

SGS Korea Co., Ltd.

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 9 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
97	Diisopentylphthalate (DIPP)	605-50-5	210-088-4	0.05	N.D.
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 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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

CQP-7081-F10 (01)

SGS Korea Co., Ltd.

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 10 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.
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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

CQP-7081-F10 (01)

SGS Korea Co., Ltd.

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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	Diethyl phthalate	84-75-3	201-559-5	0.05	N.D.
146	Triethyl 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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

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

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
174	Perfluorohexane-1-sulphonic acid and its salts	355-46-4	206-587-1	0.05	N.D.
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	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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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.
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 $\geq 0.1\%$ 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'-morpholinobutyrophenone	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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).



Test Report

No. F690101/LF-CTSAYHA20-06269

Issued Date: 2020. 06. 12 Page 16 of 17

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
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	Resorcinol	108-46-3	203-585-2	0.05	N.D.

Note:

1. RL = Reporting Limit, 0.1% (w/w) = 1,000 ppm = 1,000 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. **. -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.

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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).

CQP-7081-F10 (01)

SGS Korea Co., Ltd.

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)

Picture of Sample as Received :



AYHA20-06269.001

*** 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 <https://www.sgs.com/en/terms-and-conditions/terms-e-document>. 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).