

No. F690101/LF-CTSAYAA20-44769

Issued Date: 2020. 08. 05 Page 1 of 5

LOTTE MCC CORPORATION

Lotte World Tower, 14F, 300, Olympic-ro Songpa-gu, Seoul Korea

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

SGS File No. : AYAA20-44769

Product Name : MMA

Item/Part Name : N/A

Received Date : 2020. 07. 29

Test Period : 2020. 07. 29 to 2020. 08. 05

Test Requested : Four (4) substances newly included in the Candidate List of Substances of Very H

igh Concern (SVHC) published by European Chemicals Agency (ECHA) on June

25, 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).

SGS Korea Co., Ltd

Tommy Oh / Chemical Lab Mgr



No. F690101/LF-CTSAYAA20-44769

Issued Date: 2020. 08. 05 Page 2 of 5

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 techniqus against the following SVHC related documents published by ECHA:

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 consulations)

This list is under evaluation by ECHA.

2. Test results in this report are based on the tested sample. This report refers to testing result of composite material group by equal weight proportion. The material in each composite test group may come from more than one article.



No. F690101/LF-CTSAYAA20-44769

Issued Date: 2020. 08. 05 Page 3 of 5

Test Result(s)

No.	Substance Name	CAS number	EC number	Reporting Limit (%)	Concentration (%)
1	1-vinylimidazole	1072-63-5	214-012-0	0.05	N.D.
2	2-methylimidazole	693-98-1	211-765-7	0.05	N.D.
3	Butyl 4-hydroxybenzoate	94-26-8	202-318-7	0.05	N.D.
4	Dibutylbis(pentane-2,4-dionato- O,O')tin	22673-19-4	245-152-0	0.05	N.D.

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No. F690101/LF-CTSAYAA20-44769

Issued Date: 2020. 08. 05 Page 4 of 5

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. **. -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.
- 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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No. F690101/LF-CTSAYAA20-44769



Issued Date: 2020. 08. 05

Page 5 of 5

*** End of Report ***

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