



Test Report No. F690101/LF-CTSAYAA16-40256

Issued Date: 2016. 07. 20

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LOTTE CHEMICAL CORPORATION

115, Gajeongbuk-ro
Yuseong-gu, Daejeon
Korea

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

SGS File No. : AYAA16-40256
Product Name : GRP-353C
Item No./Part No. : N/A
Received Date : 2016. 07. 13
Test Period : 2016. 07. 13 to 2016. 07. 20
Test Results : For further details, please refer to following page(s)

SGS Korea Co., Ltd.

Jeff Jang / Chemical Lab Mgr.

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Sample No. : AYAA16-40256.001
Sample Description : GRP-353C
Item No./Part No. : N/A
Materials : N/A

Sampling

Storage	(23 ± 2) °C
Sample Size	5g

VOC (Volatile Organic Compounds)

Tedlar bag size / Sampling Volume			3L / 1L (N2)		
Analysis Conditions			65 °C , 2h		
Analytes	Test Method	Unit	MDL	Limit	Results
Benzene	MS 300-55:2014, Tenax tube, GC/MS	µg/m³	10	30	N.D.
Toluene	MS 300-55:2014, Tenax tube, GC/MS	µg/m³	10	1 000	682
Ethyl Benzene	MS 300-55:2014, Tenax tube, GC/MS	µg/m³	10	1 000	N.D.
Xylene	MS 300-55:2014, Tenax tube, GC/MS	µg/m³	20	870	N.D.
Styrene	MS 300-55:2014, Tenax tube, GC/MS	µg/m³	10	220	N.D.

Aldehyde

Tedlar bag size / Sampling Volume			3 L / 1.5 L (N2)		
Analysis Conditions			65 °C , 2h		
Analytes	Test Method	Unit	MDL	Limit	Results
Formaldehyde	MS 300-55:2014, DNPH Cartridge, HPLC	µg/m³	20	210	N.D.
Acetaldehyde	MS 300-55:2014, DNPH Cartridge, HPLC	µg/m³	20	50	N.D.
Acrolein (=Acrylaldehyde)	MS 300-55:2014, DNPH Cartridge, HPLC	µg/m³	20	50	N.D.

- NOTE:
- (1) MDL : Method Detection Limit
 - (2) N.D.: Not detected of below MDL
 - (3) MS 300-55: Hyundai-Kia motors Engineering Standard /VOC Emission test standard method
 - (4) * : The figure was expressed as a sign of inequality since the concentration was out of the calibration range in this experiment condition.
 - (5) Lab technician : Minsun Kim (VOCs), Jieun Lee (Aldehydes)
 - (6) Limit : refer to MS300-55 Table 2 Korea

- Calibration Status of the GC/MS, HPLC equipment -

Equipment	Calibration date	Next calibration date
GC/MS	2016.07.03	2017.07.02
HPLC/PDA	2016.01.11	2017.01.10

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Picture of Sample as Received:



*** End of Report***

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