

Issued Date: 2020. 07. 09

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#### **KOLON PLASTICS, INC.**

75 Saneopdanji 4-ro, Eomo-myeon Gimcheon-si, Gyeongbuk Korea

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

SGS File No. : AYGA20-03565

Product Name : POM
Item No./Part No. : N/A

Client Reference Data : MS201-02

WR101, WR301, WR301RD, WR301BK, WR301BN, WR301RD1, WR301RD2, WR301RD4, WR301LORG, WR301L

WR301LO, WR301LOAG, WR301LOBK, WR301LODA, WR301LOJB, WR301LORD, WR301LORD4, WR301LORD6, WR301LORD8, WR303, WR303BK, WR702, K300H,

K300HBK, K300HRD, K300HUBK

**Received Date** : 2020. 07. 02

Test Period : 2020. 07. 02 to 2020. 07. 09

Report Comments : By the applicant's request, item No.s/part No.s & client reference information are stated/added on

report.

**Test Results**: For further details, please refer to following page(s)

SGS Korea Co., Ltd.

Tommy Oh / Chemical Lab Mgr

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Sample No. : AYGA20-03565.001

Sample Description : POM
Item No./Part No. : N/A
Materials : KOCETAL

#### Heavy Metals

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Test Items	Unit	Test Method	MDL	Results	
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5:2013 (Determination of Cadmium by ICP-OES)	0.5	N.D.	
Lead (Pb)	mg/kg	With reference to IEC 62321-5:2013 (Determination of Lead by ICP-OES)	5	N.D.	
Mercury (Hg)	mg/kg	With reference to IEC 62321-4:2013 (Determination of Mercury by ICP-OES)	2	N.D.	
Hexavalent Chromium (Cr VI)*	mg/kg	With reference to IEC 62321-7-2:2017, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis and Microwave system and /or with reference to IEC 62321-5:2013, determination of Chromium by ICP-OES.	8	N.D.	

#### Flame Retardants-PBBs/PBDEs

Test Items	Unit	Test Method	MDL	Results
Monobromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Dibromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Tribromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Pentabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Hexabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Heptabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Octabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Nonabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Decabromobiphenyl	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Tribromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321-6:2015 (GC-MS)	5	N.D.

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**Sample No.** : AYGA20-03565.001

Sample Description : POM
Item No./Part No. : N/A
Materials : KOCETAL

#### Flame Retardants

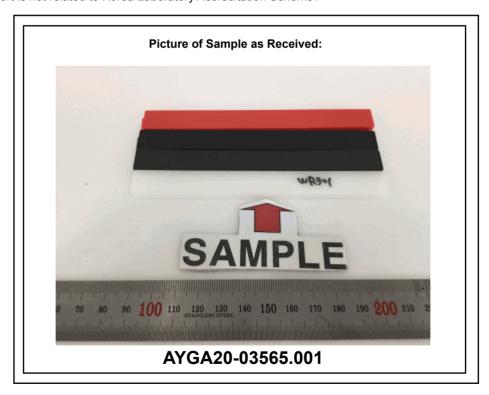
Test Items	Unit	Test Method	MDL	Results
Hexabromocyclododecane (HBCDD)	mg/kg	USEPA 3540C, LC/MS	5	N.D.

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NOTE: (1) N.D. = Not detected.(<MDL)

- (2) mg/kg = ppm,  $\mu$ g/kg = ppb
- (3) MDL = Method Detection Limit
- (4) = No regulation
- (5) Negative = Undetectable / Positive = Detectable
- (6) \*\* = Qualitative analysis (No Unit)
- (7) \* = a. The result of Hexavalent Chromium (Cr(VI)) is "ND" as the result of Chromium (Cr) is "ND", and confirmation test of Hexavalent Chromium (Cr(VI)) is not required.
  - b. If the Chromium (Cr) content is greater than the MDL of Hexavalent Chromium (Cr(VI)), confirmation test of Hexavalent Chromium (Cr(VI)) is required.
- (8) The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This test report is not related to Korea Laboratory Accreditation Scheme.



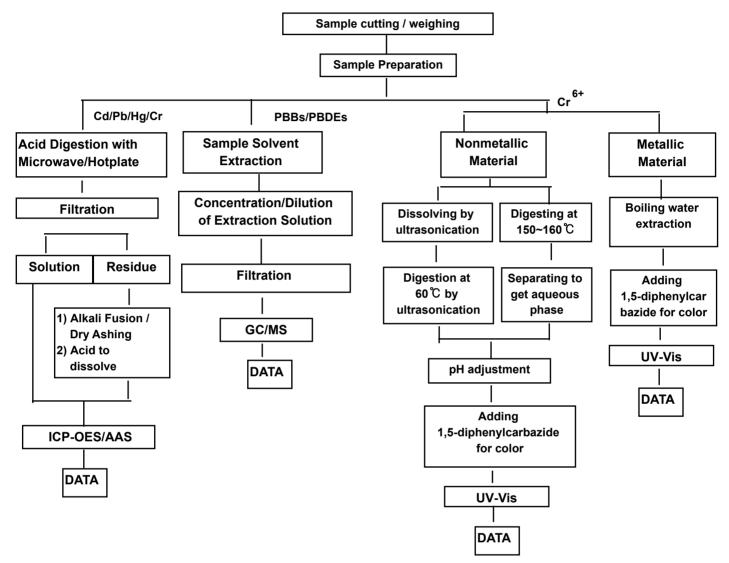
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### Testing Flow Chart for RoHS:Cd/Pb/Hg/Cr6+ /PBBs&PBDEs Testing

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The samples were dissolved totally at the acid digestion step of the above flow chart for Cd,Pb,Hg Section Chief: Timothy Jeon

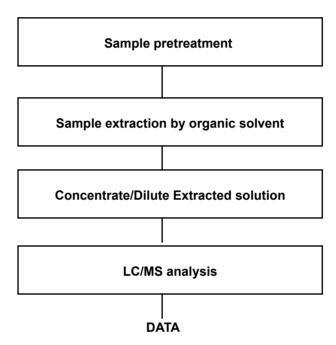
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### **Testing Flow Chart for HBCD**

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\*\*\* End of Report \*\*\*

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