

## Test Report

No.: SHAPH23015848601

Date: Oct 10, 2023

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Client Name: Hansin Precision Engineering ( Shanghai ) Co., Ltd

Client Address: No. 529 Block 2 Dongkai Road Dongjing Town Songjiang District Shanghai China 201619

Sample Name: Baydur 110 FR-2N

Manufacturer: Bayer MaterialScience ( Germany ) Co., Ltd  
Clariant Produkte (Deutschland)  
GmbH

Buyer: Covestro Polymer (China) Co,Ltd Shanghai Chempal Trading Co.,Ltd

Material and Mark: Processing formulation using Baydur 110 FR-2N as per Covestro Baydur VP.PU 1498 100 pbw Exolit® AP422, Suppliers Clariant AG 17 pbw Desmodur 44P01 128 pbw

Product Specification: 280mm x 110mm x 4mm (1pc)

Other: The following sample(s) was/were submitted and identified on behalf of the clients as : Rigid Polyurethane  
Foam Baydur 110 FR-2N by RIM process

The above sample(s) and information were provided by the client.

SGS Job No.: SHIN2309007493PL01

Sample Receiving Date: Sep 28, 2023

Testing Period: Sep 28, 2023 ~ Oct 10, 2023

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

*Lancy Liu*

Lancy Liu

Approved Signatory

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### Test Result(s):

#### Test Part Description:

| SN ID | Sample No. | SGS Sample ID           | Description       |
|-------|------------|-------------------------|-------------------|
| SN1   | 001        | SHA23-0158486-0001.C001 | Beige solid sheet |

#### Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) “-” = Not Regulated

**EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)**

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES, UV-Vis and GC-MS.

| Test Item(s)                       | Limit | Unit(s) | MDL | 001 |
|------------------------------------|-------|---------|-----|-----|
| Cadmium(Cd)                        | 100   | mg/kg   | 2   | ND  |
| Lead (Pb)                          | 1000  | mg/kg   | 2   | ND  |
| Mercury (Hg)                       | 1000  | mg/kg   | 2   | ND  |
| Hexavalent Chromium (Cr(VI))       | 1000  | mg/kg   | 8   | ND  |
| Polybromobiphenyl (PBBs)           | 1000  | mg/kg   | -   | ND  |
| Monobromobiphenyl (MonoBB)         | -     | mg/kg   | 5   | ND  |
| Dibromobiphenyl (DiBB)             | -     | mg/kg   | 5   | ND  |
| Tribromobiphenyl (TriBB)           | -     | mg/kg   | 5   | ND  |
| Tetrabromobiphenyl (TetraBB)       | -     | mg/kg   | 5   | ND  |
| Pentabromobiphenyl (PentaBB)       | -     | mg/kg   | 5   | ND  |
| Hexabromobiphenyl (HexaBB)         | -     | mg/kg   | 5   | ND  |
| Heptabromobiphenyl (HeptaBB)       | -     | mg/kg   | 5   | ND  |
| Octabromobiphenyl (OctaBB)         | -     | mg/kg   | 5   | ND  |
| Nonabromobiphenyl (NonaBB)         | -     | mg/kg   | 5   | ND  |
| Decabromobiphenyl (DecaBB)         | -     | mg/kg   | 5   | ND  |
| Polybromodiphenyl ether(PBDEs)     | 1000  | mg/kg   | -   | ND  |
| Monobromodiphenylether (MonoBDE)   | -     | mg/kg   | 5   | ND  |
| Dibromodiphenylether (DiBDE)       | -     | mg/kg   | 5   | ND  |
| Tribromodiphenylether (TriBDE)     | -     | mg/kg   | 5   | ND  |
| Tetrabromodiphenylether (TetraBDE) | -     | mg/kg   | 5   | ND  |
| Pentabromodiphenylether (PentaBDE) | -     | mg/kg   | 5   | ND  |
| Hexabromodiphenylether (HexaBDE)   | -     | mg/kg   | 5   | ND  |
| Heptabromodiphenylether (HeptaBDE) | -     | mg/kg   | 5   | ND  |
| Octabromodiphenylether (OctaBDE)   | -     | mg/kg   | 5   | ND  |
| Nonabromodiphenylether (NonaBDE)   | -     | mg/kg   | 5   | ND  |
| Decabromodiphenylether (DecaBDE)   | -     | mg/kg   | 5   | ND  |
| Dibutyl Phthalate(DBP)             | 1000  | mg/kg   | 50  | ND  |
| Benzyl Butyl Phthalate(BBP)        | 1000  | mg/kg   | 50  | ND  |



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| Test Item(s)                       | Limit | Unit(s) | MDL | 001 |
|------------------------------------|-------|---------|-----|-----|
| Bis-(2-ethylhexyl) Phthalate(DEHP) | 1000  | mg/kg   | 50  | ND  |
| Diisobutyl Phthalate(DIBP)         | 1000  | mg/kg   | 50  | ND  |

### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ( $w=0$ ) stated in ILAC-G8:09/2019.



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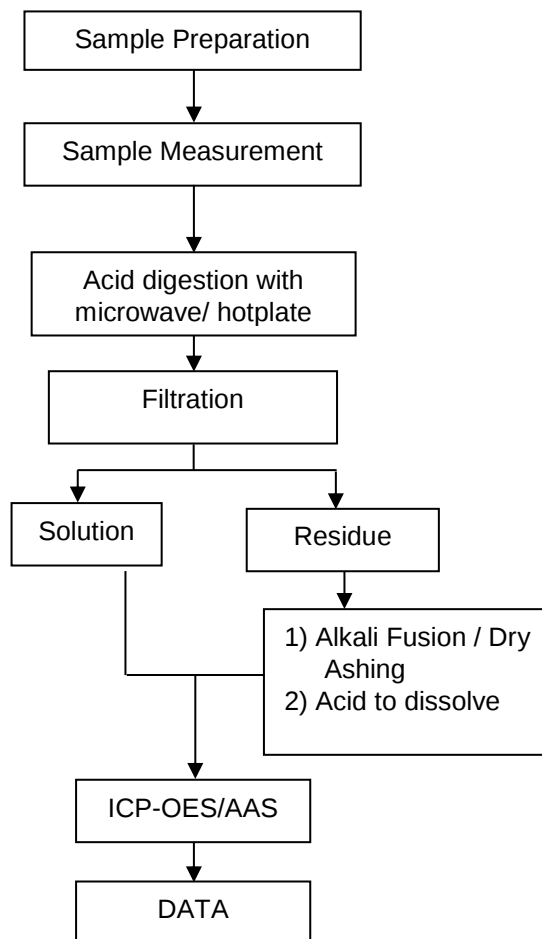
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### Elements Testing Flow Chart

These samples were dissolved totally by pre-conditioning method according to below flow chart.



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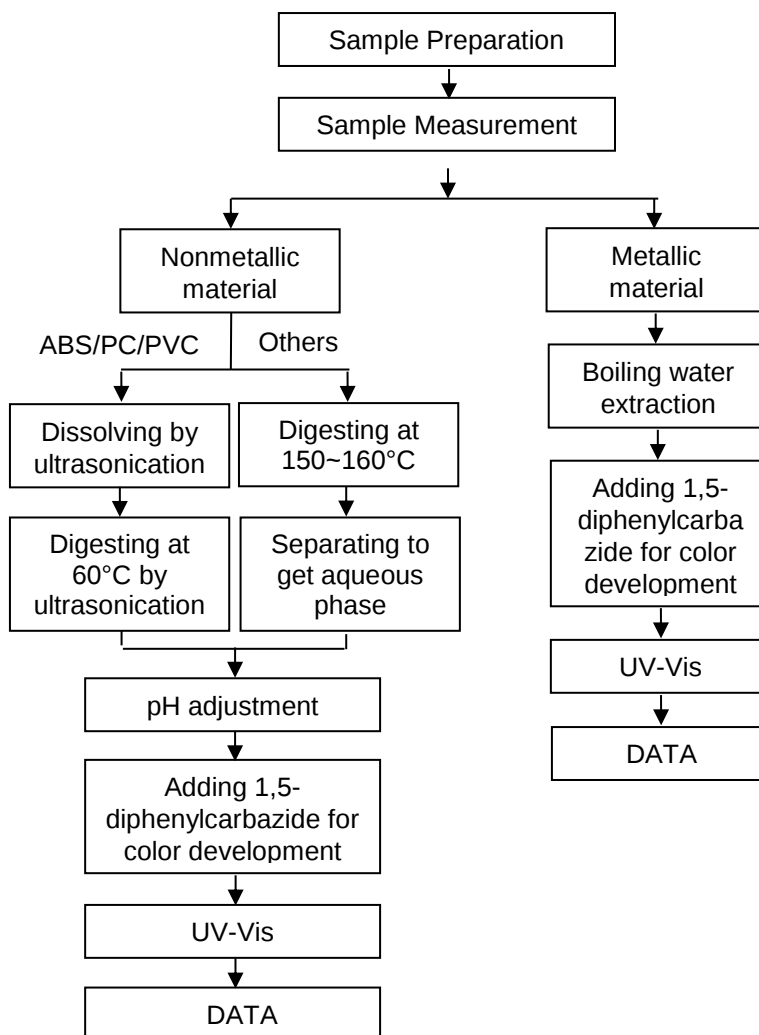
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### Hexavalent Chromium (Cr(VI)) Testing Flow Chart



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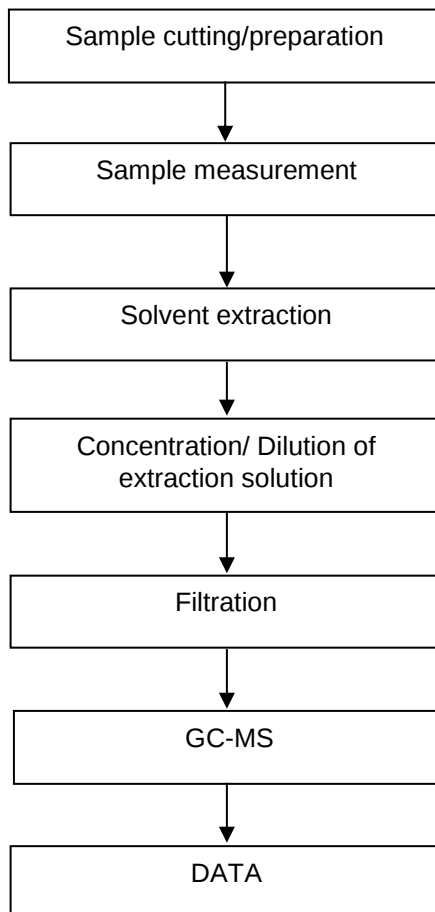
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#### PBBs/PBDEs Testing Flow Chart



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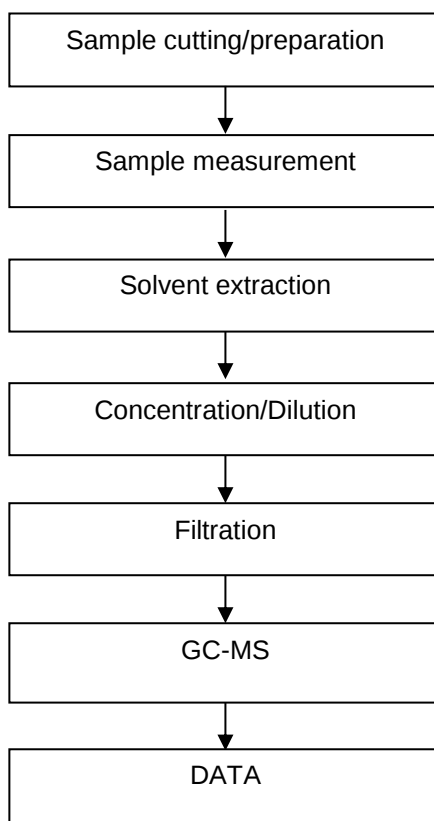
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#### Phthalates Testing Flow Chart



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