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Test Report No.: NGBEC23000214001 **Date:** Feb 06, 2023 Page 1 of 8

Client Name: NINGBO LG YONGXING CHEMICAL CO., LTD

Client Address: 66 HAITIAN ROAD, HOUHAITANG INDUSTRY ZONE, ZHENHAI, NINGBO, ZHEJIANG,

Sample Name: **ABS RESIN** Model No.: FR-500A

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

SGS Job No.: NP23-000210 Sample Receiving Date: Jan 31, 2023

Testing Period: Jan 31, 2023 - Feb 06, 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).

| Test Requirement | Conclusion |
|---|------------|
| 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), Dibutyl phthalate | Pass |
| (DBP), Butyl benzyl phthalate (BBP), Bis(2-ethylhexyl) phthalate (DEHP), | |
| and Diisobutyl phthalate (DIBP) | |

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch



李覃刚

Approved Signatory

This report is English version of NGBEC23000214002.



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Test Result(s):

Test Part Description:

| SN ID | Sample No. | SGS Sample ID | Description |
|-------|------------|-------------------------|-----------------------|
| SN1 | A1 | NGB23-0002140-0001.C001 | Beige solid particles |

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), Dibutyl phthalate (DBP), Butyl benzyl phthalate (BBP), Bis(2-ethylhexyl) phthalate (DEHP), 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 IEC62321-8:2017, analysis was performed by ICP-OES, UV-Vis

and GC-MS.

| Test Item(s) | Limit | Unit(s) | MDL | A1 |
|------------------------------------|-------|---------|-----|----|
| 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 | 1 | 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 |



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| Test Item(s) | Limit | Unit(s) | MDL | A1 |
|------------------------------------|-------|---------|-----|----|
| Benzyl Butyl Phthalate(BBP) | 1000 | mg/kg | 50 | ND |
| 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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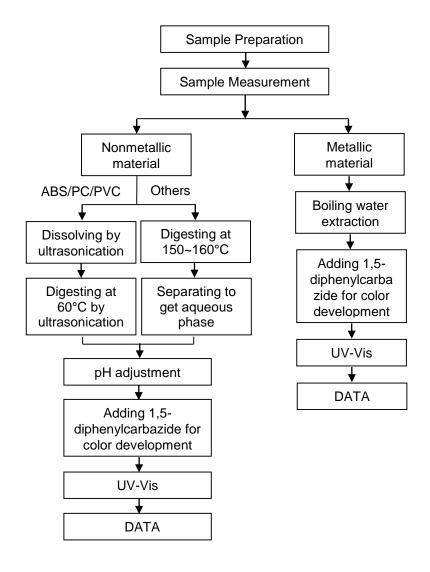
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Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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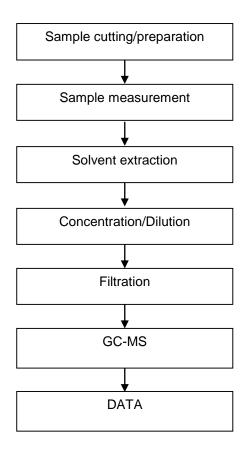
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Phthalates Testing Flow Chart





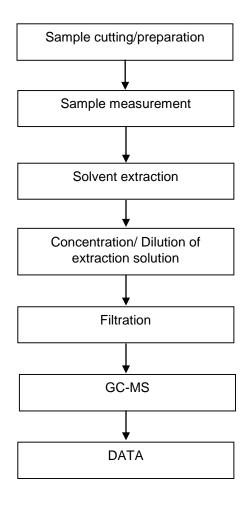
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PBBs/PBDEs Testing Flow Chart





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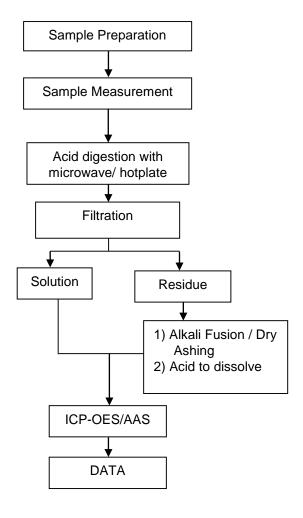
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Elements (IEC62321) Testing Flow Chart

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





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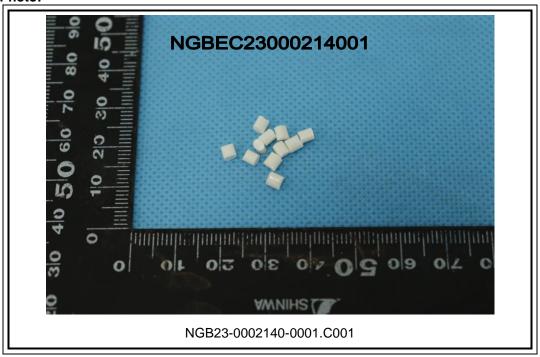
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