



171020340088



中国认可
国际互认
检测
TESTING
CNAS L6760

Test Report

Report No HAP18122316505R1

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Applicant JF Polymers(Suzhou) Co.,Ltd.

Address Haicheng Industrial Park,Bldg 7,Changshu Economic and Technological Zone,Changshu,Jiangsu Province ,China

Sample Information

Sample Name PolyMax™ PLA

Sample Description Material: filament

*The information above is provided and confirmed by the applicant.

Sample Received Date Dec.24,2018

Testing Period Dec.24,2018 to Dec.27,2018

Testing Requested As per client's request,to determine the RoHS 2.0 (Pb,Cd,Hg,Cr⁶⁺, PBBs, PBDEs, DBP,BBP,DEHP,DIBP) in the submitted sample according to RoHS Directive 2015/863/EU Annex II.

Testing Results Please refer to next page(s)

Remark

Based on the test samples,the test results of Cadmium(Cd),Lead(Pb),Mercury(Hg), Hexavalent Chromium (Cr⁶⁺),The sum of Polybrominated Biphenyls(PBBs) and The sum of Polybrominated Diphenyl Ethers(PBDEs) ,Dibutyl Phthalate (DBP) ,Benzylbutyl Phthalate (BBP) ,Bis-(2-ethylhexyl) Phthalate (DEHP) ,Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive 2015/863/EU Annex II.

Signer:

Paul Chen
Authorized signatory

Date: Dec.29,2018

[Website of verification report: CNCA verification platform yz.cncaic.cn](http://www.cncaic.cn)

江苏环谱检测技术服务有限公司

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Determination of RoHS 2.0 (unit: mg/kg)

Testing method

- (1) With reference to IEC 62321-5:2013. By ICP - OES for measuring;
- (2) With reference to IEC 62321-4:2013. By ICP-OES for measuring;
- (3) With reference to IEC 62321-7-2-2017. By UV-VIS for measuring;
- (4) With reference to IEC 62321-6:2015. By GC-MS for measuring.
- (5) With reference to IEC 62321-8:2017 .By GC-MS for measuring.

| Testing Item(s) | Method | MDL | Limit | Results |
|--|--------|-----|-------|---------|
| Lead (Pb) | (1) | 2 | 1000 | ND |
| Cadmium (Cd) | | 2 | 100 | ND |
| Mercury (Hg) | (2) | 2 | 1000 | ND |
| Chromium(VI) (Cr ⁶⁺) | (3) | 8 | 1000 | ND |
| Polybrominated Biphenyls (PBBs) | (4) | — | 1000 | ND |
| Polybrominated Diphenyl Ethers (PBDEs) | | — | 1000 | ND |
| Dibutyl Phthalate (DBP) | (5) | 50 | 1000 | ND |
| Benzylbutyl Phthalate (BBP) | | 50 | 1000 | ND |
| Bis-(2-ethylhexyl) Phthalate (DEHP) | | 50 | 1000 | ND |
| Diisobutyl phthalate (DIBP) | | 50 | 1000 | ND |

Note:

- (1) 1 mg/kg=1 ppm=0.0001%
- (2) MDL=Method Detection Limit
- (3) ND=Not Detected (<MDL)
- (4) "—" =Not Regulated
- (5) Polybrominated diphenyl ethers
- (6) Polybrominated Biphenyls,Polybrominated Diphenyl Ethers list,and detection limit (MDL)

| Polybrominated Biphenyls (PBBs) | MDL | Polybrominated Diphenyl Ethers (PBDEs) | MDL |
|---------------------------------|-----|--|-----|
| Bromobiphenyl | 5 | Bromobiphenyl ether | 5 |
| Dibromobiphenyl | 5 | Dibromobiphenyl ether | 5 |
| Tribromobiphenyl | 5 | Tribromobiphenyl ether | 5 |
| Tetrabromobiphenyl | 5 | Tetrabromodiphenyl ether | 5 |
| Pentabromobiphenyl | 5 | Pentabromodiphenyl ether | 5 |
| Hexabromobiphenyl | 5 | Hexabromodiphenyl ether | 5 |
| Heptabromobiphenyl | 5 | Heptabromodiphenyl ether | 5 |
| Octabromobiphenyl | 5 | Octabromobiphenyl ether | 5 |
| Nonabromobiphenyl | 5 | Nonabromobiphenyl ether | 5 |
| Marabromodiphenyl | 5 | Marabromobiphenyl ether | 5 |

(7) IEC 62321-8:2017 is not within the scope of CMA certification, DIBP is not within the scope of CNAS and CMA certification

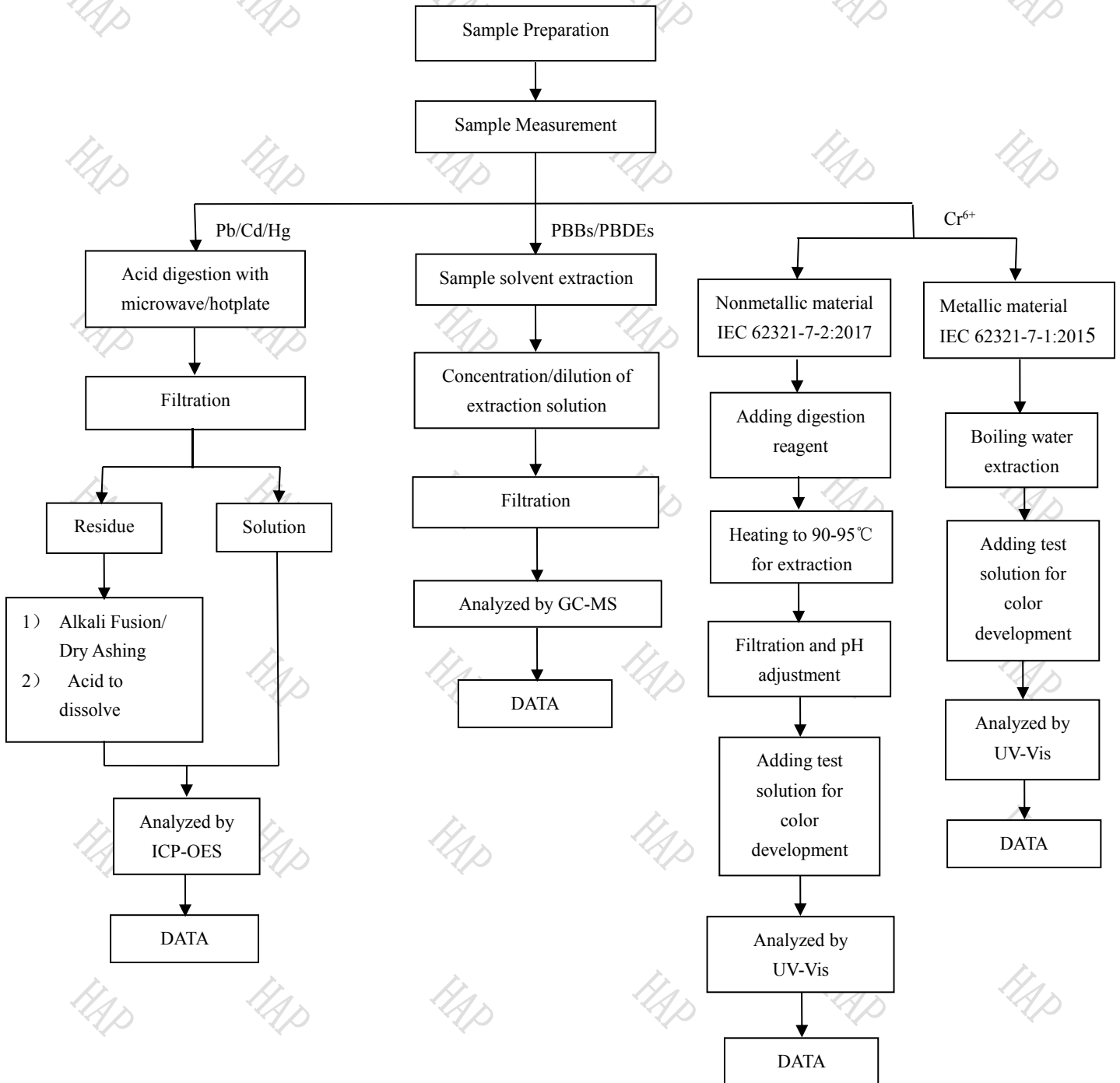


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RoHS Testing Floe Chart

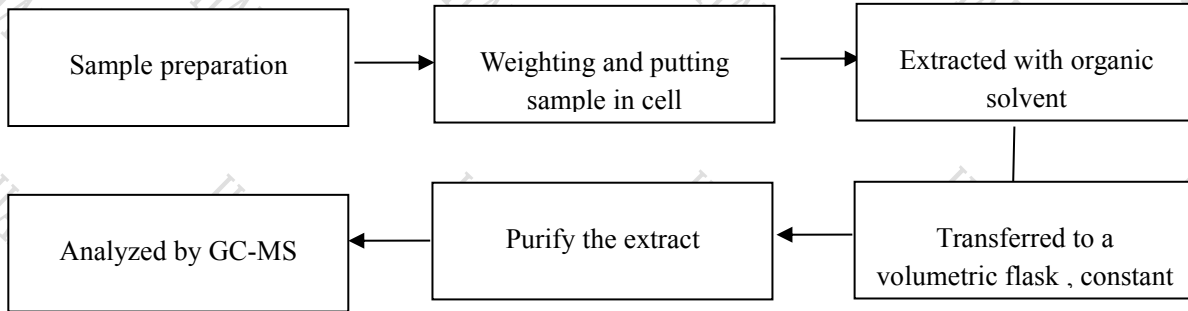


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Phthalate Testing Flow Chart:



Sample photo:



End of report

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(具体通用条款详见 <http://www.hap-test.com/customerservice.html>)