

May 17, 2018

Date:

Applicant: LONGQUAN HONGYE PLASTIC CO., LTD.

NO.1, DONGLING ROAD , LONGQUAN

INDUSTRIAL PARK, LONGQUAN CITY, ZHEJIANG

PROVINCE, PR, CHINA Attn: QIAN RENJIAN

Sample Description:

One(1) Group Of Submitted Sample Said To Be: **Black Granule**Item Name: Black Masterbatch HY-C05PE.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Page(s).

Conclusion:

Tested Sample Standard Result
Submitted Sample Restriction Of The Use Of Certain Hazardous Substance In Electrical And Pass

Electronic Equipment (RoHs Directive 2011/65/EU And (EU)2015/863)

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Hobo Li Manager







Tests Conducted (As Requested By The Applicant)

1 RoHS Chemical Test

(A) Test Result Summary:

Testing Item	Result	
Cadmium (Cd) Content (mg/kg)	ND	
Lead (Pb) Content (mg/kg)	36	
Mercury (Hg) Content (mg/kg)	ND	
Chromium (VI)(Cr ⁶⁺) Content (mg/kg)	ND	
Polybrominated Biphenyls (PBBs) Content (mg/kg)		
Monobromobiphenyl (MonoBB)	ND	
Dibromobiphenyl (DiBB)	ND	
Tribromobiphenyl (TriBB)	ND	
Tetrabromobiphenyl (TetraBB)	ND	
Pentabromobiphenyl (PentaBB)	ND	
Hexabromobiphenyl (HexaBB)	ND	
Heptabromobiphenyl (HeptaBB)	ND	
Octabromobiphenyl (OctaBB)	ND	
Nonabromobiphenyl (NonaBB)	ND	
Decabromobiphenyl (DecaBB)	ND	
Sum Of PBBs	ND	
Polybrominated Diphenyl Ethers (PBDEs) Content (mg/kg)		
Monobromodiphenyl Ether (MonoBDE)	ND	
Dibromodiphenyl Ether (DiBDE)	ND	
Tribromodiphenyl Ether (TriBDE)	ND	
Tetrabromodiphenyl Ether (TetraBDE)	ND	
Pentabromodiphenyl Ether (PentaBDE)	ND	
Hexabromodiphenyl Ether (HexaBDE)	ND	
Heptabromodiphenyl Ether (HeptaBDE)	ND	
Octabromodiphenyl Ether (OctaBDE)	ND	
Nonabromodiphenyl Ether (NonaBDE)	ND	
Decabromodiphenyl Ether (DecaBDE)	ND	
Sum Of PBDEs	ND	
Phthalates Content (mg/kg)		
Bis(2-ethylhexyl)phthalate(DEHP)	ND	
Butyl benzyl phthalate(BBP)	ND	
Dibutyl phthalate(DBP)	ND	
Diisobutyl phthalate(DIBP)	ND	

mg/kg = Milligram Per Kilogram ND = Not Detected





Tests Conducted (As Requested By The Applicant)

(B) RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr ⁶⁺)	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)
Phthalates(DEHP, BBP, DBP, DIBP)	0.1% (1000 mg/kg)

The above limits were quoted from 2011/65/EU and (EU) 2015/863 for homogeneous material.

(C) Test Method:

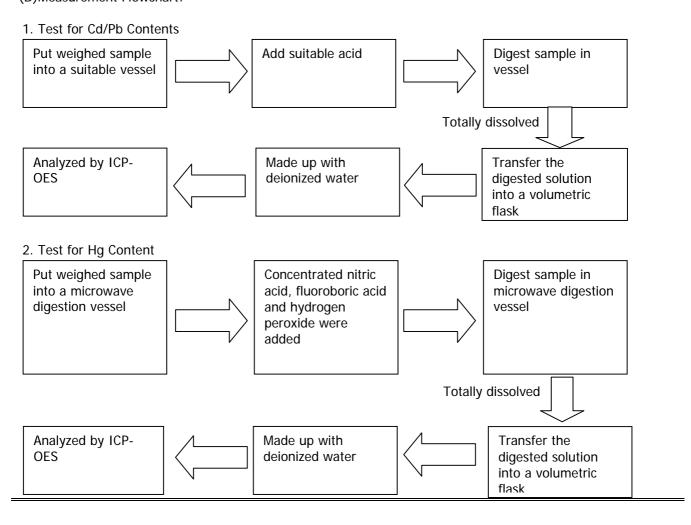
Testing Item	Testing Method	Reporting Limit
Cadmium (Cd) Content	With reference to IEC 62321-5 Edition 1.0:2013, by acid digestion and determined by ICP - OES	2 mg/kg
Lead (Pb) Content	With reference to IEC 62321-5 Edition 1.0:2013, by acid digestion and determined by ICP - OES	2 mg/kg
Mercury (Hg) Content	With reference to IEC 62321-4:2013+A1:2017, by acid digestion and determined by ICP - OES	2 mg/kg
Chromium (VI)(Cr ⁶⁺) Content	With reference to IEC 62321-7-2 Edition 1.0:2017, by alkaline digestion and determined by UV-VIS Spectrophotometer	1 mg/kg
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs) Content	With reference to IEC 62321-6 Edition 1.0:2015, by solvent extraction and determined by GC/MS and further HPLC confirmation when necessary	5 mg/kg
Phthalates(DEHP, BBP, DBP, DIBP) Content	With reference to IEC 62321-8:2017,By Solvent Extraction And Determined By GC/MS	100mg/kg

Date Sample Received : May 14, 2018

Testing Period: May 14, 2018 To May 17, 2018



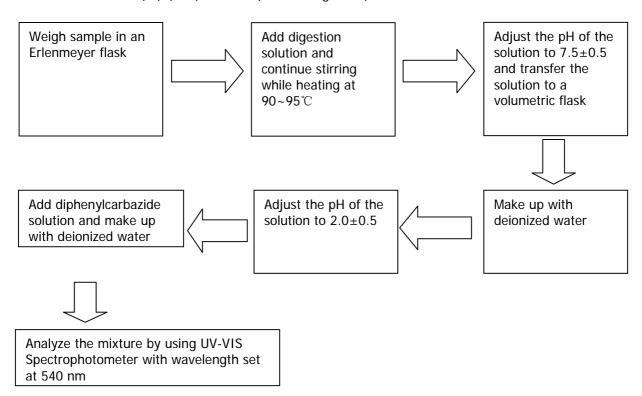
Tests Conducted (As Requested By The Applicant)
(D)Measurement Flowchart:



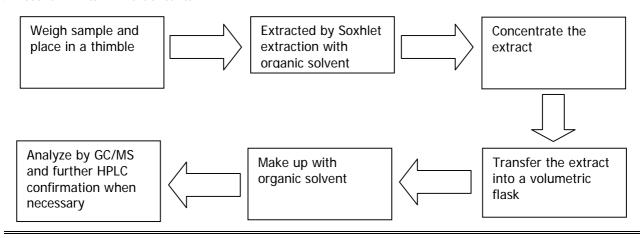


Tests Conducted (As Requested By The Applicant)

3. Test for Chromium (VI) (Cr⁶⁺) Content (Alkaline Digestion)



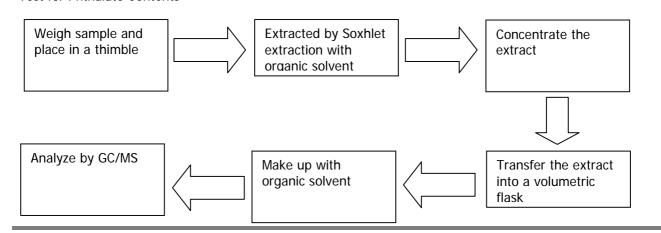
4. Test for PBBs/PBDEs Contents





Tests Conducted (As Requested By The Applicant)

5 Test for Phthalate Contents





Tests Conducted (As Requested By The Applicant)





End of Report

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