

1 TEST RESULT

1.1 European council directive 2002/95/EC & 2005/618/EC -Restriction of hazardous substances (RoHS) -Heavy Metal Lead (Pb), Cadmium (Cd), Mercury (Hg) , Hexavalent Chromium (Cr⁶⁺) and Flame Retardant Polybrominated Biphenyls & Polybrominated Biphenyl Ethers (PBBs & PBDEs) test

Test item	Test result (mg/kg)	RoHS Directive Requirements (mg/kg)	
	01		
Cadmium (Cd)	ND (<2)	<100	
Lead (Pb)	ND (<2)	<1000	
Mercury (Hg)	ND (<2)	<1000	
Chromium (VI) (Cr ⁶⁺)	Negative	<1000	
PolybrominatedBiphenyls (PBBs)	ND (<5)	<1000	
Monobromobiphenyl (MonoBB)	ND (<5)		
Dibromobiphenyl (DiBB)	ND (<5)		
Tribromobiphenyl (TriBB)	ND (<5)		
Tetrabromobiphenyl (TetraBB)	ND (<5)		
Pentabromobiphenyl (PentaBB)	ND (<5)		
Hexabromobiphenyl (HexaBB)	ND (<5)		
Heptabromobiphenyl (HeptaBB)	ND (<5)		
Octabromobiphenyl (OctaBB)	ND (<5)		
Nonabromobiphenyl (NonaBB)	ND (<5)		
Decabromobiphenyl (DecaBB)	ND (<5)		
Polybrominated DiphenylEthers (PBDEs)	ND (<5)		<1000
MonobromodiphenylEther (MonoBDE)	ND (<5)		
DibromodiphenylEther (DiBDE)	ND (<5)		
Tribromodiphenyl Ether(TriBDE)	ND (<5)		
TetrabromodiphenylEther (TetraBDE)	ND (<5)		
PentabromodiphenylEther (PentaBDE)	ND (<5)		
HexabromodiphenylEther (HexaBDE)	ND (<5)		
HeptabromodiphenylEther (HeptaBDE)	ND (<5)		
OctabromodiphenylEther (OctaBDE)	ND (<5)		
NonabromodiphenylEther (NonaBDE)	ND (<5)		
DecabromodiphenylEther (DecaBDE)	ND (<5)		

Remark:

- mg/kg = parts per million = ppm.
- ND = Not detected (less than method detection limit).
- < = Less than.
- Negative = A negative test result indicates the absence of Cr(VI) coating.

Test method and method detection limit (MDL)

Test item	Test method	MDL
Cadmium (Cd)	With reference to IEC 62321 :2008, by acid digestion and determined by ICP-OES	2 mg/kg
Lead (Pb)	With reference to IEC 62321 :2008, by acid digestion and determined by ICP-OES	2 mg/kg
Mercury (Hg)	With reference to IEC 62321 :2008, by acid digestion and determined by ICP-OES	2 mg/kg
Chromium (VI) (Cr ⁶⁺)	With reference to IEC 62321:2008, by spot test and boiling water extraction	See remark
Polybrominated Biphenyls (PBBs) & Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321 :2008, by solvent extraction and determined by GC/MS	5 mg/kg

Remark:

- Negative = A negative test result indicates the absence of Cr(VI) coating.
- Positive = A positive test result indicates the presence of Cr(VI) coating.

1.2 Perfluorooctane sulfonates (PFOS) content

With reference to US EPA3550C & US EPA8321B, to determine the Perfluorooctane sulfonates (PFOS) content in the submitted sample by High Performance Liquid Chromatography (HPLC).

Test item	Test result (mg/kg)
	01
Perfluorooctane sulfonates (PFOS)	ND (< 2)

Remark:

- Method detection limit = 2mg/kg
- mg/kg = parts per million = ppm
- ND = Not detection, less than the method detection limit.
- < = Less than.

1.3 Perfluorooctanoic acid (PFOA) content

With reference to US EPA3550C & US EPA8321B, to determine the Perfluorooctanoic acid (PFOA) content in the submitted sample by High Performance Liquid Chromatography (HPLC).

Test item	Test result (mg/kg)
	01
Perfluorooctanoic acid (PFOA)	ND (< 2)

Remark:

- Method detection limit = 2mg/kg
- mg/kg = parts per million = ppm
- ND = Not detection, less than the method detection limit.
- < = Less than.

1.4 Antimony(Sb) content

As specified by the applicant, with reference to US EPA 3052(1996) & US EPA 6010C(2007), acid digestion and determine the Antimony(Sb) content in the submitted sample by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) .

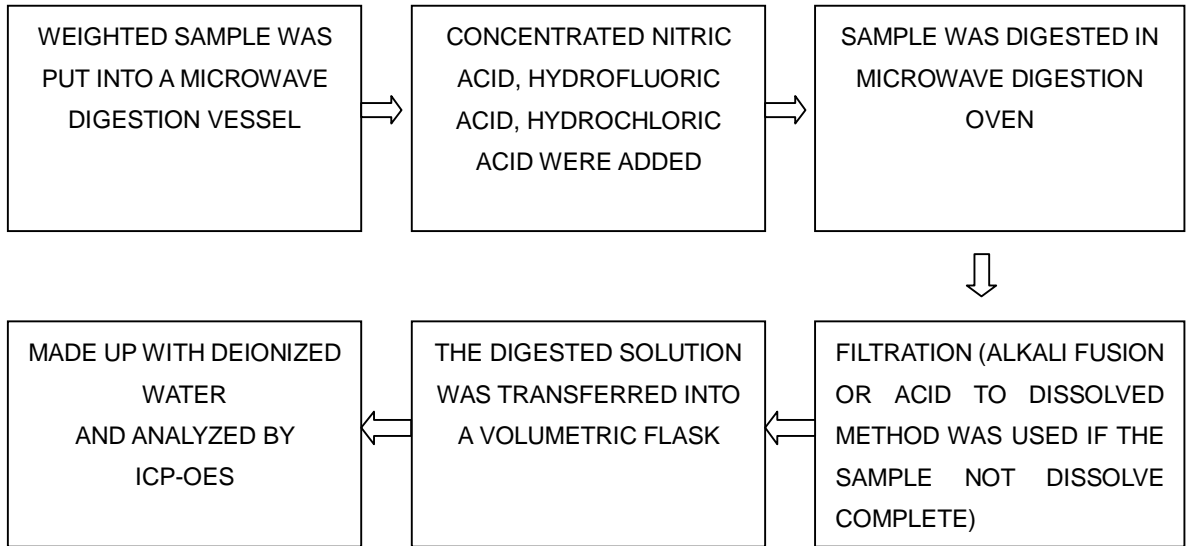
Test item	Test result (%)
	01
Antimony (Sb)	ND(<0.0002)

Remark:

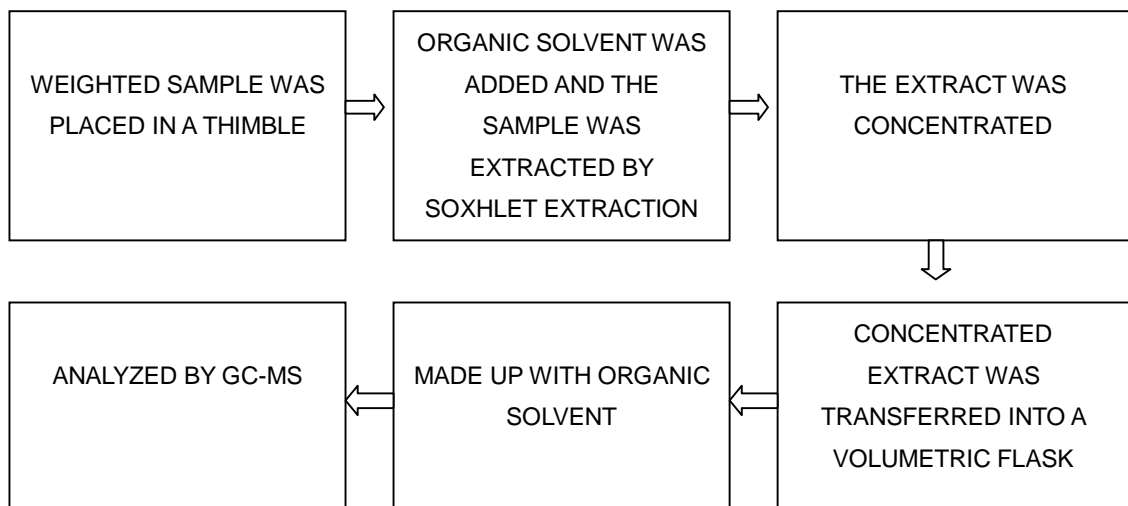
- < = Less than.
- % = Percentage.
- ND = Not detected (less than method detection limit).

2. MEASUREMENT FLOWCHART

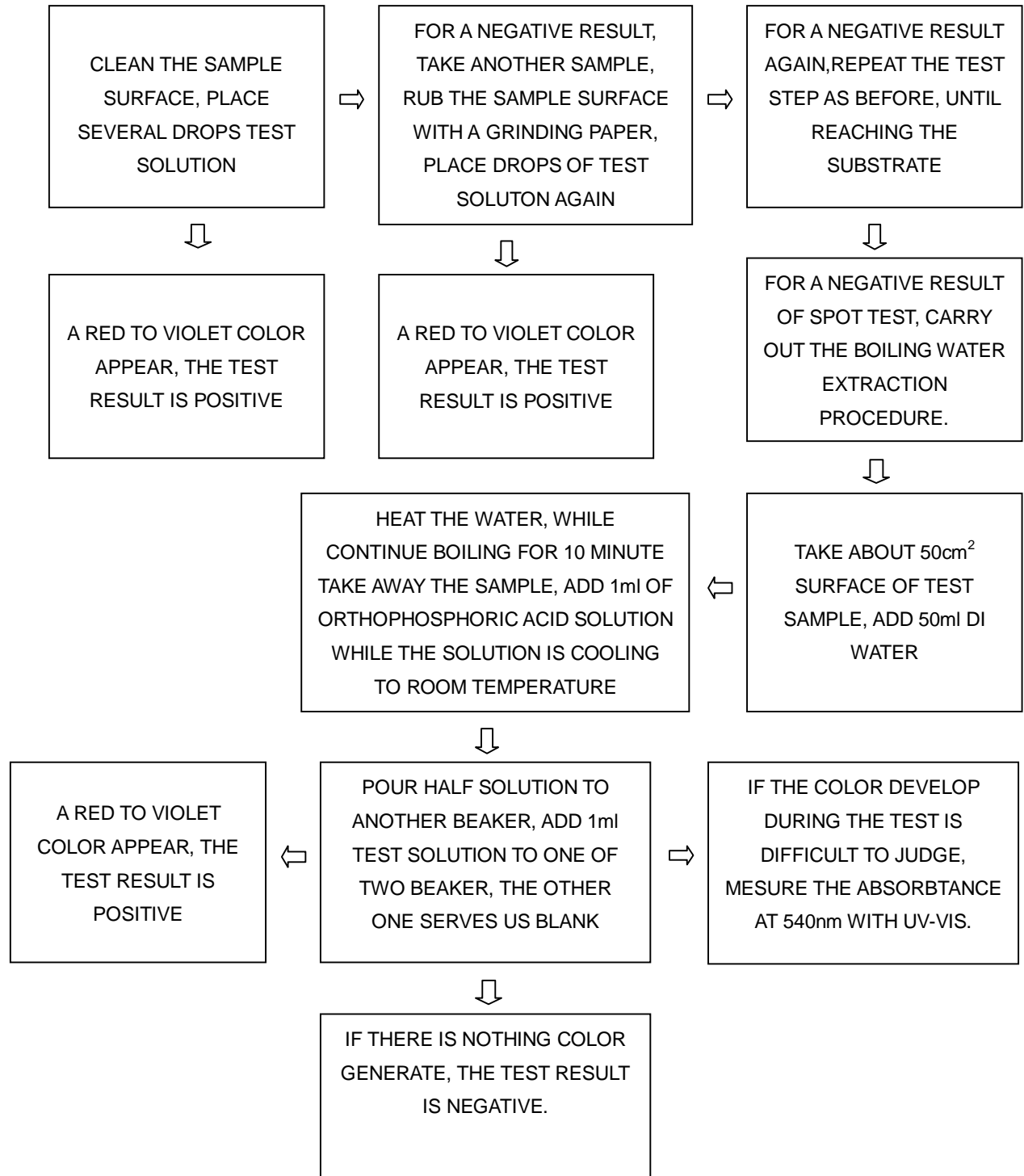
2.1 Test for Cd / Pb /Sb / Hg content



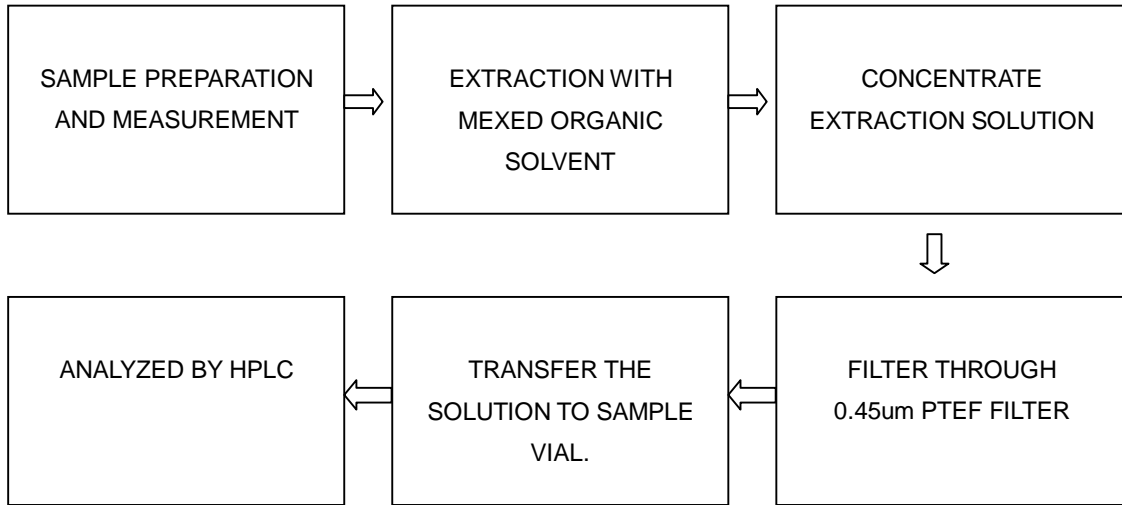
2.2 Test for phthalates(PBBS/PBBBES) content



2.3 Test for hexavalent chromium (Cr⁶⁺) content-spot test/boiling water extracton



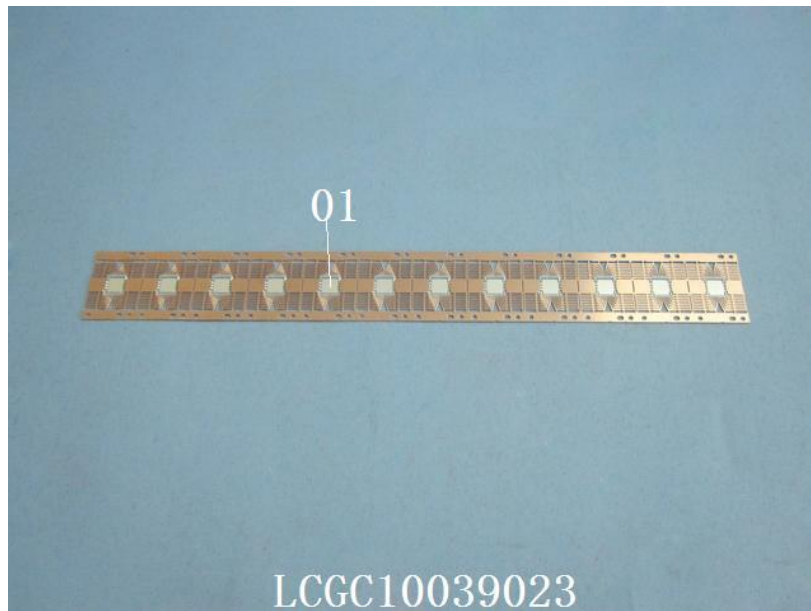
2.4 Test for PFOS / PFOA content



3. TESTED COMPONENTS

- 01 Silvery /coppery metal

Photo of the Sample



LCGC10039023

End of Report