

Test Report

Report No. SCL01I029339001

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Applicant GUANGZHOU JIUJIN ELECTRONIC MATERIAL CO., LTD

Address THREE BUILDING, INDUSTRIAL ZONE, RENHE TOWN, BAIYUN DISTRICT, GUANGZHOU CITY CHINA

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

Sample Name 导电裸布
Color 灰色
Material 涤纶纤维 铜 镍
Client Reference 1.PW-260-085 PW-230-080 PW-300-050 PW-300-035 PW-210-070 DF-260-120
Information DF-290-100 PW-360-040 NJ-300-200 NJ-300-190 CF-250-210 DF-230 PW-300-028
FG-260-085 FG-300-040 FG-280-100 FG-280-100II WF-15-030A WF-10-035A
WF-20-050 WF-17-040 WF-40-210 WS-200-085
2.20160322-01 20160322-02 20160322-03 20160322-04 20160318-01 20160318-02
20160318-03 20160318-04 20160315-02 20160315-04 20160311-01 20160311-02
20160311-03 20160309-01 20160309-03 20160309-05 20160309-02 20160308-01
20160315-01 20160315-02 20160315-03 20160314-01 20160315-01

Sample Received Date Apr. 15, 2016

Testing Period Apr. 15, 2016 to Apr. 20, 2016

Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs), Phthalates(DBP, BBP, DEHP, DIBP), Fluorine(F), Chlorine(Cl), Bromine(Br), Iodine(I), Hexabromocyclododecane (HBCDD), Dimethyl fumarate(DMF), Perfluorooctane Sulfonates(PFOS), Perfluorooctanoic Acid(PFOA), Polycyclic Aromatic Hydrocarbons(PAHs), Phthalates in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).

Conclusion

Tested Sample	According to directive	Result
Submitted Sample	RoHS Directive 2011/65/EU with amendment (EU) 2015/863	Pass

Pass means that the results shown on the report do not exceed the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

Tested by Jiang Guo Reviewed by Ando Feng
 Approved by Danny Liu Date Apr. 20, 2016
 Danny Liu
 Technical Manager



No. R187212112

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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Test Method

Tested Item(s)	Test Method	Measured Equipment(s)
Lead(Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Cadmium(Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Mercury(Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis
Polybrominated Biphenyls(PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates(DBP, BBP, DEHP, DIBP)	Refer to EN 14372:2004(E)	GC-MS
Fluorine (F)	Refer to BS EN 14582:2007	IC
Chlorine (Cl)	Refer to BS EN 14582:2007	IC
Bromine (Br)	Refer to BS EN 14582:2007	IC
Iodine (I)	Refer to BS EN 14582:2007	IC
Polycyclic Aromatic Hydrocarbons(PAHs)	AfPS GS 2014:01 PAK	GC-MS
Hexabromocyclododecane (HBCDD)	Refer to US EPA 3540C:1996 & US EPA 8270D:2007	GC-MS
Dimethyl fumarate(DMF)	Refer to US EPA 3550C:2007 & US EPA 8270D:2007	GC-MS
Perfluorooctane Sulfonates(PFOS)	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS
Perfluorooctanoic Acid(PFOA)	Refer to US EPA 3550C:2007 & US EPA 8321B:2007	LC-MS-MS
Phthalates	Refer to EN 14372:2004(E)	GC-MS

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Test Result(s)

Tested Item(s)	Result	MDL	Limit
Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	2 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL	Limit
Polybrominated Biphenyls(PBBs)			
Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg	
Tribromobiphenyl	N.D.	5 mg/kg	
Tetrabromobiphenyl	N.D.	5 mg/kg	
Pentabromobiphenyl	N.D.	5 mg/kg	
Hexabromobiphenyl	N.D.	5 mg/kg	
Heptabromobiphenyl	N.D.	5 mg/kg	
Octabromobiphenyl	N.D.	5 mg/kg	
Nonabromobiphenyl	N.D.	5 mg/kg	
Decabromobiphenyl	N.D.	5 mg/kg	

Tested Item(s)	Result	MDL	Limit
Polybrominated Diphenyl Ethers(PBDEs)			
Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg	
Tribromodiphenyl ether	N.D.	5 mg/kg	
Tetrabromodiphenyl ether	N.D.	5 mg/kg	
Pentabromodiphenyl ether	N.D.	5 mg/kg	
Hexabromodiphenyl ether	N.D.	5 mg/kg	
Heptabromodiphenyl ether	N.D.	5 mg/kg	
Octabromodiphenyl ether	N.D.	5 mg/kg	
Nonabromodiphenyl ether	N.D.	5 mg/kg	
Decabromodiphenyl ether	N.D.	5 mg/kg	

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Tested Item(s)	Result	MDL	Limit
Phthalates			
Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
Butylbenzyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
Diisobutyl phthalate(DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg

Tested Item(s)	Result	MDL
Halogen(s)		
Fluorine(F)	N.D.	10 mg/kg
Chlorine(Cl)	N.D.	10 mg/kg
Bromine(Br)	N.D.	10 mg/kg
Iodine(I)	N.D.	10 mg/kg

Limits for PAHs content (mg/kg) for material of (grip) surfaces, which are to be categorized on account of the results of the risk analysis.

Parameters	Category 1	Category 2		Category 3	
	Materials intended to be put in the mouth or materials of toys with foreseeable long-term skin contact (longer than 30 seconds)	Materials not covered by category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact) or repeated short-term skin contact [#]		Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 seconds (short-term skin contact)	
		Toys covered by Directive 2009/48/EC	Other products	Toys covered by Directive 2009/48/EC	Other products
Benzo[a]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Dibenz[a,h]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[g,h,i]perylene	<0.2	<0.2	<0.5	<0.5	<1
Indenol[1,2,3-cd]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene	<1 Sum	<5 Sum	<10 Sum	<20 Sum	<50 Sum
Naphthalene	<1	<2		<10	
Sum 18 PAHs	<1	<5	<10	<20	<50

[#] Formulation "of repeated short-term skin contact" REACH Annex XVII No. 50 supplement (REGULATION (EU) No.1272/2013)

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Tested Item(s)	Result	MDL
Polycyclic Aromatic Hydrocarbons(PAHs)		
Naphthalene	N.D.	0.2 mg/kg
Acenaphthylene	N.D.	0.2 mg/kg
Acenaphthene	N.D.	0.2 mg/kg
Fluorene	N.D.	0.2 mg/kg
Phenanthrene	N.D.	0.2 mg/kg
Anthracene	N.D.	0.2 mg/kg
Fluoranthene	N.D.	0.2 mg/kg
Pyrene	N.D.	0.2 mg/kg
Benzo[a]anthracene	N.D.	0.2 mg/kg
Chrysene	N.D.	0.2 mg/kg
Benzo[b]fluoranthene	N.D.	0.2 mg/kg
Benzo[k]fluoranthene	N.D.	0.2 mg/kg
Benzo[a]pyrene	N.D.	0.2 mg/kg
Indeno[1,2,3-cd]pyrene	N.D.	0.2 mg/kg
Dibenzo[a,h]anthracene	N.D.	0.2 mg/kg
Benzo[g,h,i]perylene	N.D.	0.2 mg/kg
Benzo[j]fluoranthene	N.D.	0.2 mg/kg
Benzo[e]pyrene	N.D.	0.2 mg/kg
Sum (Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene)	N.D.	/
Sum 18 PAHs	N.D.	/

Tested Item(s)	Result	MDL
Hexabromocyclododecane (HBCDD)	N.D.	5 mg/kg
Dimethyl fumarate(DMF)	N.D.	0.1 mg/kg
Perfluorooctane Sulfonates(PFOS)	N.D.	5 mg/kg
Perfluorooctanoic Acid(PFOA)	N.D.	5 mg/kg

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Tested Item(s)	Result	MDL
Phthalates		
Dimethyl phthalate(DMP) CAS#:131-11-3	N.D.	50 mg/kg
Diethyl phthalate(DEP) CAS#:84-66-2	N.D.	50 mg/kg
Dipropyl phthalate(DPRP) CAS#:131-16-8	N.D.	50 mg/kg
Diisobutyl phthalate(DIBP) CAS#:84-69-5	N.D.	50 mg/kg
Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg
Dipentyl phthalate(DPP) CAS#:131-18-0	N.D.	50 mg/kg
Diheptyl phthalate(DHP) CAS#:3648-21-3	N.D.	50 mg/kg
Butylbenzyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg
Dicyclohexyl phthalate(DCHP) CAS#:84-61-7	N.D.	50 mg/kg
Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	50 mg/kg
Diisooctyl phthalate(DIOP) CAS#:27554-26-3	N.D.	50 mg/kg
Di-n-octyl phthalate(DNOP) CAS#:117-84-0	N.D.	50 mg/kg
Diisononyl phthalate(DINP) CAS#:28553-12-0,68515-48-0	N.D.	50 mg/kg
Diisodecyl phthalate(DIDP) CAS#:26761-40-0,68515-49-1	N.D.	50 mg/kg
Dinonyl phthalate(DNP) CAS#:84-76-4	N.D.	50 mg/kg
Diisononyl adipate(DINA) CAS#:33703-08-1	N.D.	50 mg/kg
Diisopentyl phthalate (DIPP) CAS#:605-50-5	N.D.	50 mg/kg
Di-n-hexyl phthalate (DNHP) CAS#:84-75-3	N.D.	50 mg/kg
Dimethoxyethyl phthalate (DMEP) CAS#:117-82-8	N.D.	50 mg/kg
N-Pentyl-isopentyl phthalate (NIPP) CAS#:776297-69-9	N.D.	100 mg/kg
Diocetyl terephthalate (DOTP) CAS#:6422-86-2	N.D.	50 mg/kg
Dibenzyl phthalate (DBzP) CAS#:523-31-9	N.D.	50 mg/kg

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Tested Item(s)	Result	MDL
Phthalates		
Diundecyl phthalates(DUP) CAS#:3648-20-2	N.D.	50 mg/kg
Di(2-ethylhexyl) Adipate(DEHA) CAS#:103-23-1	N.D.	50 mg/kg
Di-iso-heptyl-phthalates(DIHpP) CAS#:41451-28-9	N.D.	50 mg/kg
Decyl octyl phthalate (nDnOP) CAS#:119-07-3	N.D.	50 mg/kg
Didecyl phthalate (DnDP) CAS#:84-77-5	N.D.	50 mg/kg
Di-iso-hexyl-phthalates (DIHxP) CAS#:146-50-9	N.D.	50 mg/kg
Ditridecyl phthalate (DITDP) CAS#:68515-47-9	N.D.	50 mg/kg
Ditrydecyl phthalates (DTDP) CAS#:119-06-2	N.D.	50 mg/kg
Dimethylterephthalates (DMT) CAS#:120-61-6	N.D.	50 mg/kg
Diisoundecyl phthalate (DIUP) CAS#:96507-86-7	N.D.	50 mg/kg
^① Diundecyl phthalate, branched and linear CAS#:85507-79-5	N.D.	100 mg/kg
^① 1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters (DHNUP) CAS#:68515-42-4	N.D.	100 mg/kg
^① 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich(DIHP) CAS#:71888-89-6	N.D.	100 mg/kg
Bis(hydroxyethyl)terephthalate (BHET) CAS#:959-26-2	N.D.	50 mg/kg
1-Butyl 2-cyclohexyl phthalate (BCyP) CAS#:84-64-0	N.D.	50 mg/kg
Butyl decyl phthalates(BDP) CAS#:89-19-0	N.D.	50 mg/kg
Phthalic acid, bis(2-ethoxyethyl) ester (DEEP) CAS#:605-54-9	N.D.	50 mg/kg
Phthalic acid, bis(2-butoxyethyl) ester (DBEP) CAS#:117-83-9	N.D.	50 mg/kg
^① 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear CAS#:84777-06-0	N.D.	100 mg/kg

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Tested Item(s)	Result	MDL
Phthalates		
^① 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear CAS#:68515-50-4	N.D.	100 mg/kg
Butyl octyl phthalate(BOP) CAS#:84-78-6	N.D.	50 mg/kg
Hexyl 2-ethylhexyl phthalate(HEHP) CAS#:75673-16-4	N.D.	50 mg/kg
Di-2-propylheptyl phthalate(DPHpP) CAS#:53306-54-0	N.D.	30 mg/kg
Diphenyl phthalate (DPhP) CAS#:84-62-8	N.D.	50 mg/kg
Diallyl phthalate (DAP) CAS#:131-17-9	N.D.	50 mg/kg

Tested Sample/Part Description

Gray conductive fabric

Remark: The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.
 -MDL = Method Detection Limit
 -N.D. = Not Detected (<MDL)
 -mg/kg = ppm = parts per million
 -^①: In view of the substances are established as UVCB substances (substances of unknown or variable composition, complex reaction products or biological materials) consisting of different and variable constituents, the test results are calculated based on the main constituents of the representative compounds for substances.

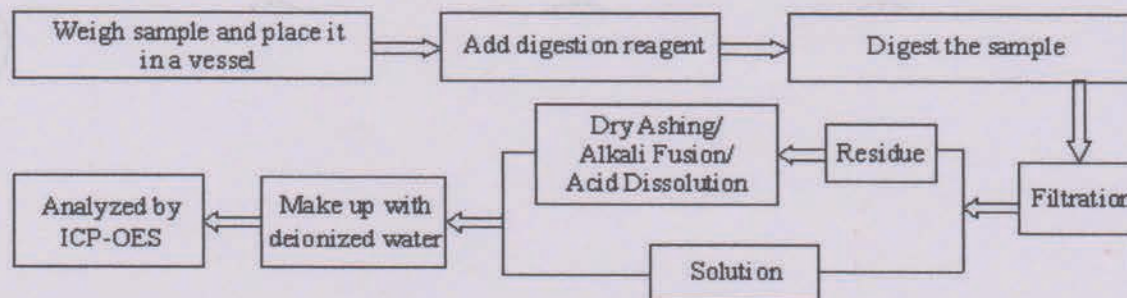
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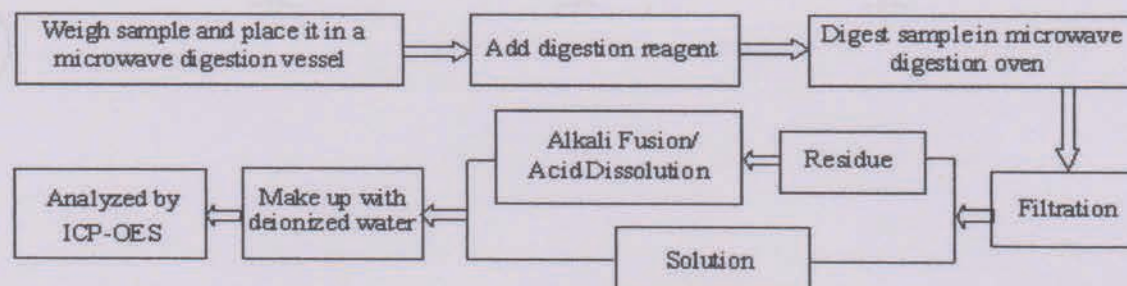
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Test Process

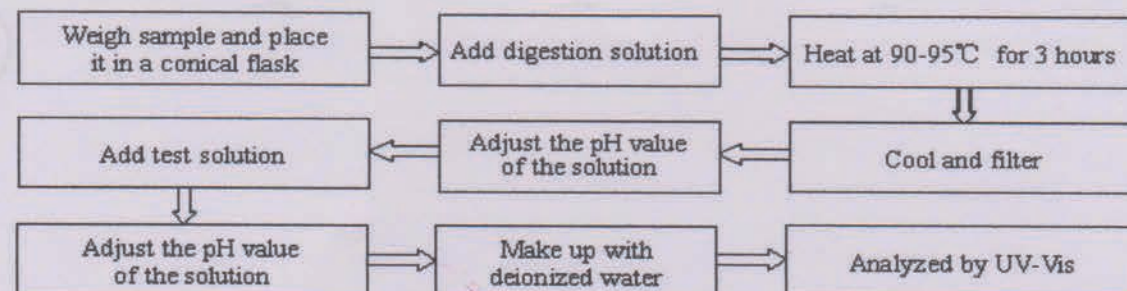
1. Lead (Pb), Cadmium (Cd)



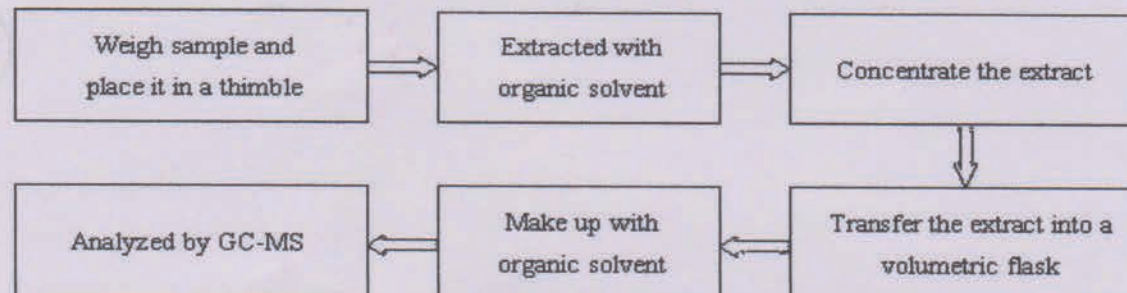
2. Mercury (Hg)



3. Hexavalent Chromium(Cr(VI))



4. Polybrominated Biphenyls(PBBs) , Polybrominated Diphenyl Ethers(PBDEs)

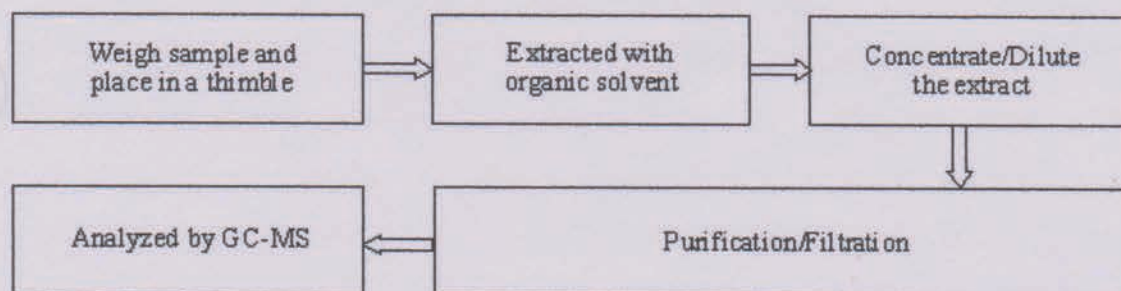


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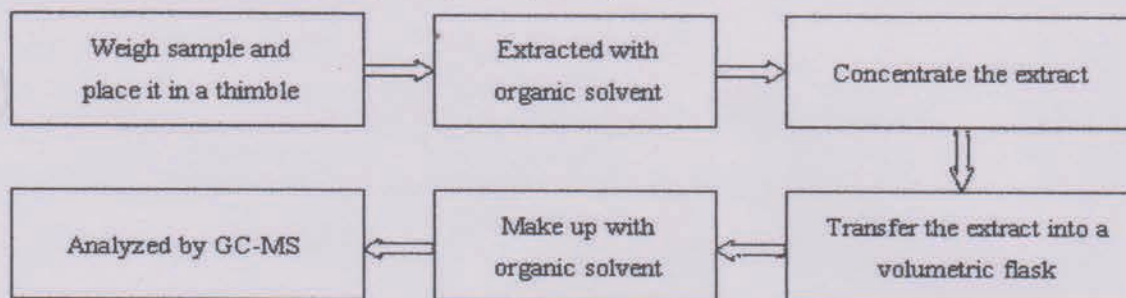
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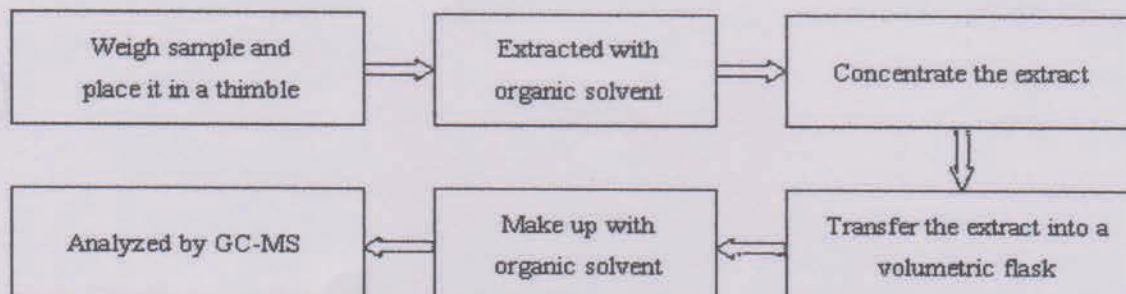
5. Polycyclic Aromatic Hydrocarbons(PAHs)



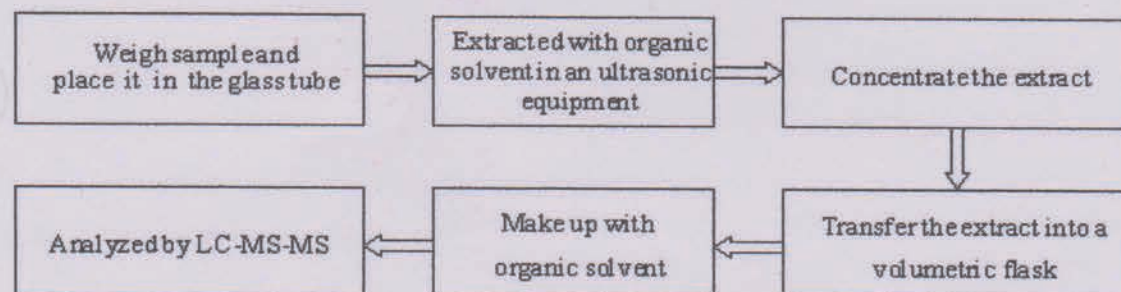
6. Phthalates, Phthalates(DBP, BBP, DEHP, DIBP)



7. Dimethyl fumarate(DMF)



8. Perfluorooctane Sulfonates(PFOS), Perfluorooctanoic Acid(PFOA)

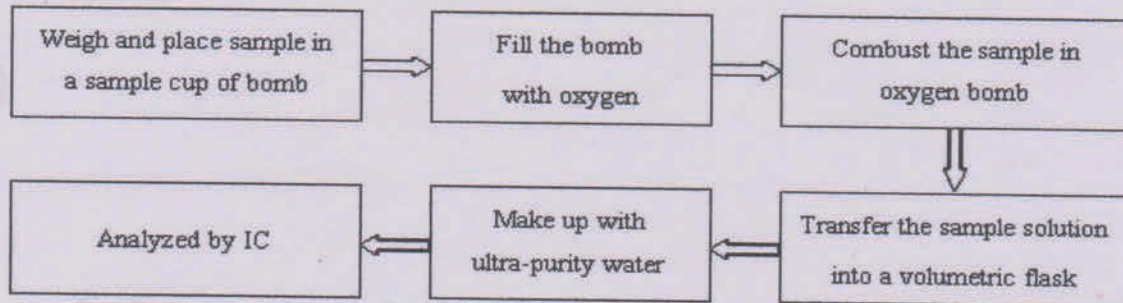


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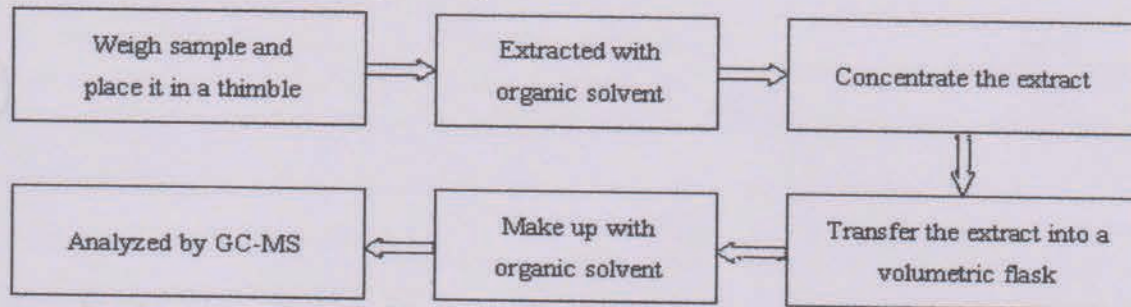
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9. Bromine(Br), Chlorine(Cl), Fluorine(F), Iodine(I)



10. Hexabromocyclododecane (HBCDD)



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Photo(s) of the sample(s)



*** End of report ***

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