

# Test Report

**Report No.** ECL01J072676009

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**Applicant** CYG WAYON CIRCUIT PROTECTION CO.,LTD

**Address** 1001 SHIWAN 7TH ROAD, SHANGHAI, 201207 P.R. CHINA

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

**Sample Name** PP

**Sample Received Date** Nov. 20, 2017

**Testing Period** Nov. 20, 2017 to Nov. 28, 2017

**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), Chlorine(Cl), Bromine(Br), Antimony(Sb), Beryllium(Be) in the submitted sample(s).

**Test Method**

Please refer to the following page(s).

**Test Result(s)**

Please refer to the following page(s).

Tested by

Liu Jie  
Su Hongwei

Approved by

Su Hongwei

Senior Laboratory Manager

Centre Testing International Pinbiao(Shanghai) Co., Ltd.

Reviewed by

Taoying

Date

Nov. 28, 2017

No. R131279013

No.1996,Xinjinqiao Road, Pudong New District,Shanghai,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 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013 Ed.1.0 | UV-Vis/ICP-OES        |
| Polybrominated Biphenyls(PBBs)         | IEC 62321-6:2015   | GC-MS                 |
| Polybrominated Diphenyl Ethers (PBDEs) | IEC 62321-6:2015   | GC-MS                 |
| Phthalates(DBP, BBP, DEHP, DIBP)       | IEC 62321-8:2017   | GC-MS                 |
| Chlorine (Cl)                          | Refer to EN 14582:2016   | IC                    |
| Bromine (Br)                           | Refer to EN 14582:2016   | IC                    |
| Antimony(Sb)                           | Refer to US EPA 3052:1996 &US EPA 6010D:2014   | ICP-OES               |
| Beryllium(Be)                          | Refer to US EPA 3052:1996 &US EPA 6010D:2014   | ICP-OES               |

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## Test Result(s)

| Tested Item(s)               | Result | MDL     |
|------------------------------|--------|---------|
| Lead (Pb)                    | N.D.   | 2 mg/kg |
| Cadmium (Cd)                 | N.D.   | 2 mg/kg |
| Mercury (Hg)                 | N.D.   | 2 mg/kg |
| Hexavalent Chromium (Cr(VI)) | N.D.   | 8 mg/kg |

| Tested Item(s)                        | Result | MDL     |
|---------------------------------------|--------|---------|
| <b>Polybrominated Biphenyls(PBBs)</b> |        |         |
| Monobromobiphenyl                     | N.D.   | 5 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     |
|--|--------|---------|
| <b>Polybrominated Diphenyl Ethers(PBDEs)</b> |        |         |
| Monobromodiphenyl ether                      | N.D.   | 5 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      |
|--|--------|----------|
| <b>Phthalates</b>                                |        |          |
| Dibutyl phthalate(DBP) CAS#:84-74-2              | N.D.   | 50 mg/kg |
| Butylbenzyl phthalate(BBP) CAS#:85-68-7          | N.D.   | 50 mg/kg |
| Di-2-ethylhexyl phthalate(DEHP)<br>CAS#:117-81-7 | N.D.   | 50 mg/kg |
| Diisobutyl phthalate(DIBP) CAS#:84-69-5          | N.D.   | 50 mg/kg |

| Tested Item(s) | Result    | MDL     |
|----------------|-----------|---------|
| <b>Halogen</b> |           |         |
| Chlorine (Cl)  | 338 mg/kg | 10mg/kg |
| Bromine (Br)   | N.D.      | 10mg/kg |

| Tested Item(s) | Result | MDL      |
|----------------|--------|----------|
| Antimony(Sb)   | N.D.   | 5 mg/kg  |
| Beryllium(Be)  | N.D.   | 10 mg/kg |

**Tested Sample/Part Description** Yellow resin board

**Remark:** The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury, Antimony, Beryllium.

-MDL = Method Detection Limit

-N.D. = Not Detected (&lt;MDL)

-mg/kg = ppm = parts per million

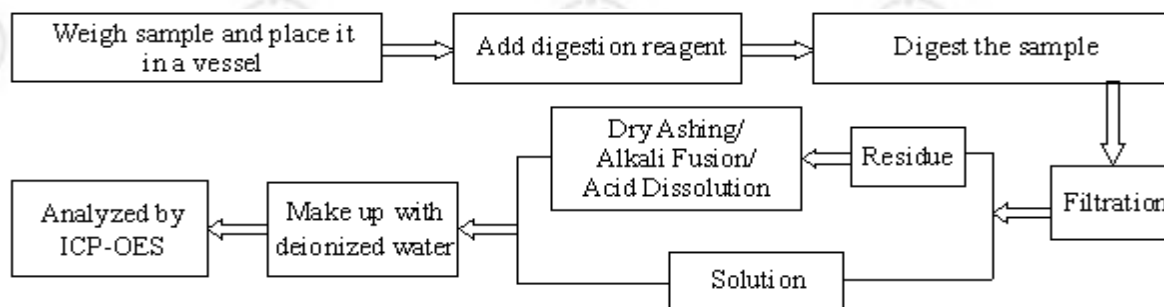
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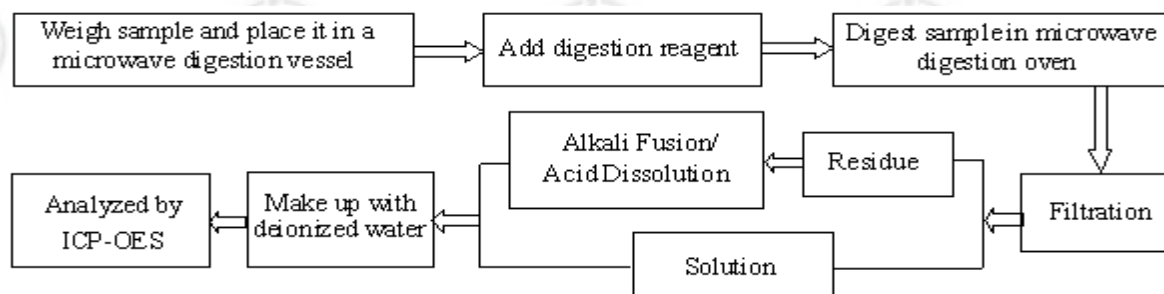
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## Test Process

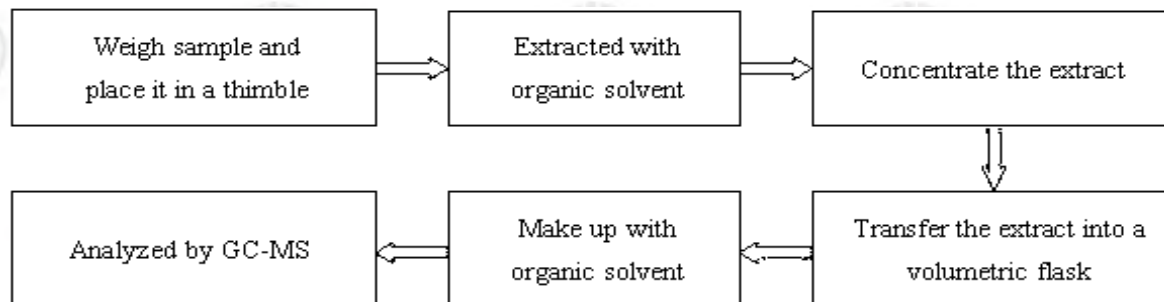
### 1. Lead (Pb), Cadmium (Cd), Chromium (Cr)



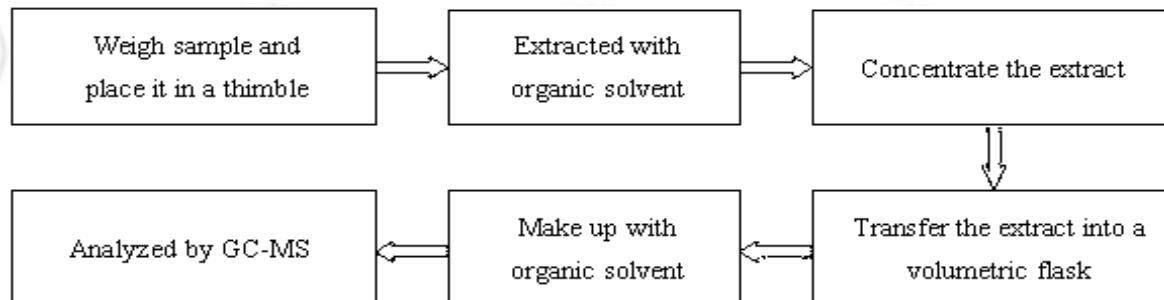
### 2. Mercury (Hg)



### 3. Polybrominated Biphenyls(PBBs) , Polybrominated Diphenyl Ethers(PBDEs)



### 4. Phthalates(DBP, BBP, DEHP, DIBP)

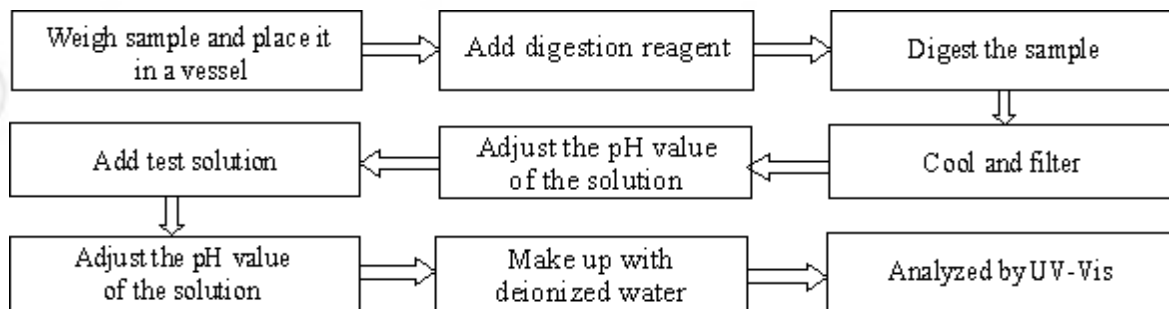


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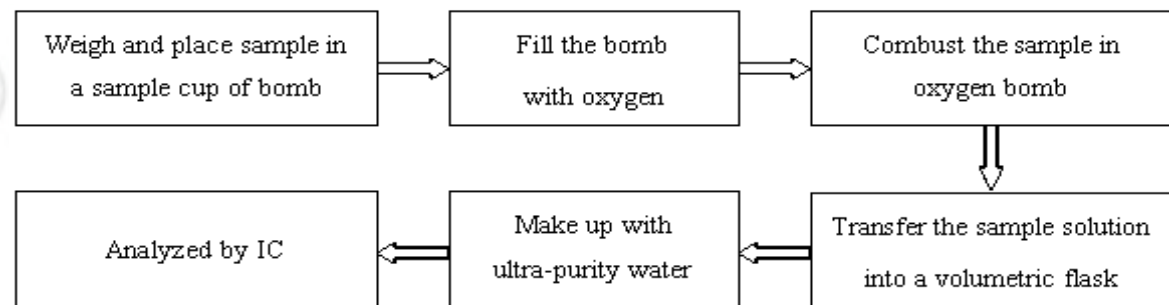
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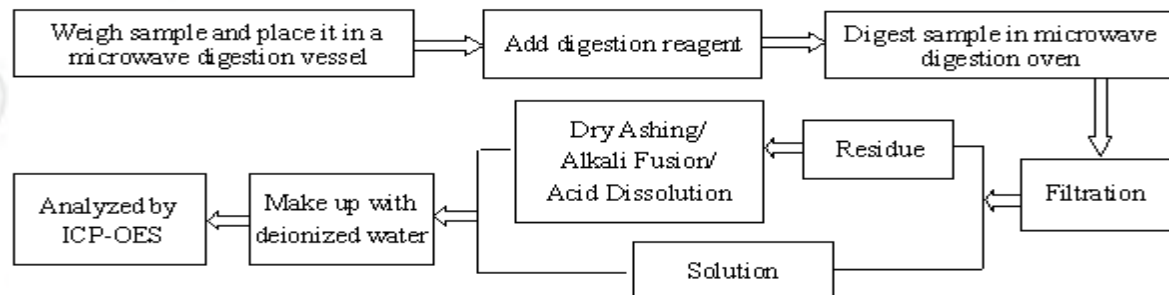
## 5. Hexavalent Chromium(Cr(VI))



## 6. Bromine(Br), Chlorine(Cl)



## 7. Antimony(Sb), Beryllium(Be)



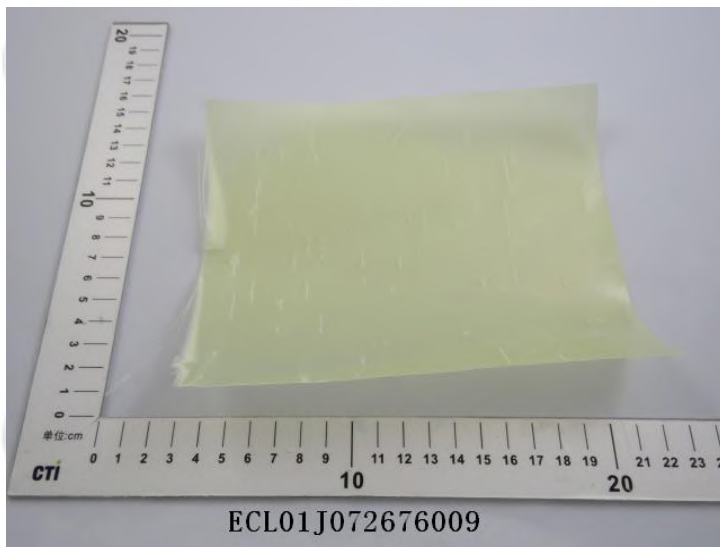


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## Photo(s) of the sample(s)



\*\*\* End of report \*\*\*

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