

# Test Report

**Report No.** SCL01G038409006

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**Applicant** PETROCHINA REFINING & CHEMICALS COMPANY

**Address** 9 DONGZHIMEN NORTH STREET, DONGCHENG DISTRICT, BEIJING, P.R. CHINA, 100007

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

Sample Name PP(polypropylene)  
 Part No. HP500P  
 Manufacturer PETROCHINA DAQING REFINING & PETROCHEMICAL COMPANY  
 Sample Received Date Sep. 25, 2014  
 Testing Period Sep. 25, 2014 to Sep. 27, 2014

**Test Requested** As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted sample(s).

**Test Method**

| Test 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 Biphenyl(PBBs)         | IEC 62321:2008 Ed.1 Annex A | GC-MS                 |
| Polybrominated Diphenyl Ethers(PBDEs) | IEC 62321:2008 Ed.1 Annex A | GC-MS                 |

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

Tested by

*Rick Lin*

Reviewed by

*Vangar He*

approved by

*Danny Liu*

Date

Sep. 27, 2014



Danny Liu  
 Technical Manager

No. R144102181

Centre Testing International (Shenzhen) Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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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.   | 2 mg/kg |

| Tested Item(s)                       | Result | MDL     |
|--------------------------------------|--------|---------|
| <b>Polybrominated Biphenyl(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 |

**Tested Sample/Part Description** Semi-transparent plastic grains

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

-MDL = Method Detection Limit

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

-mg/kg = ppm = parts per million

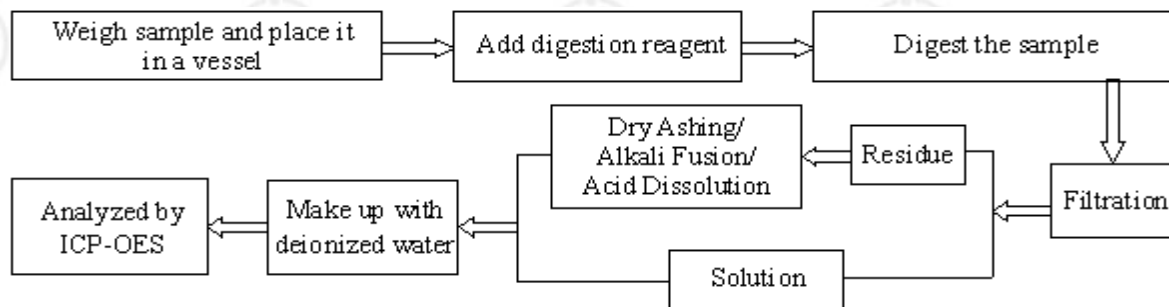
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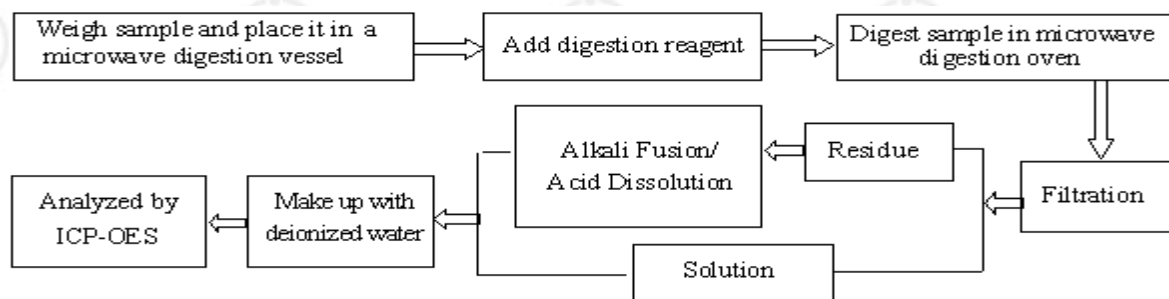
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## Test Process

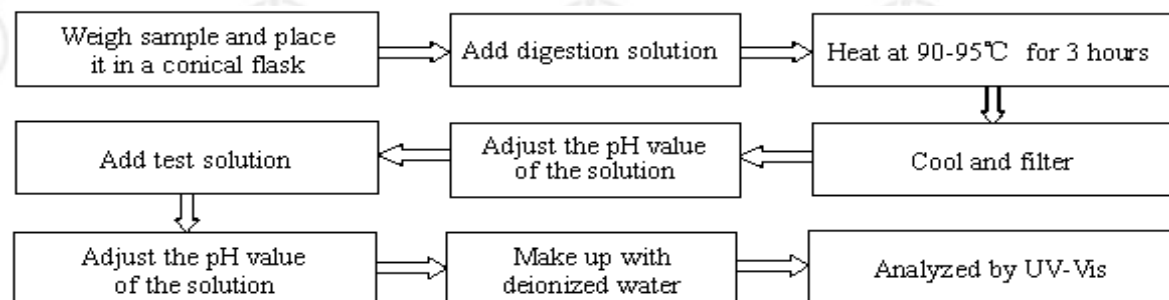
### 1. Lead (Pb), Cadmium (Cd)



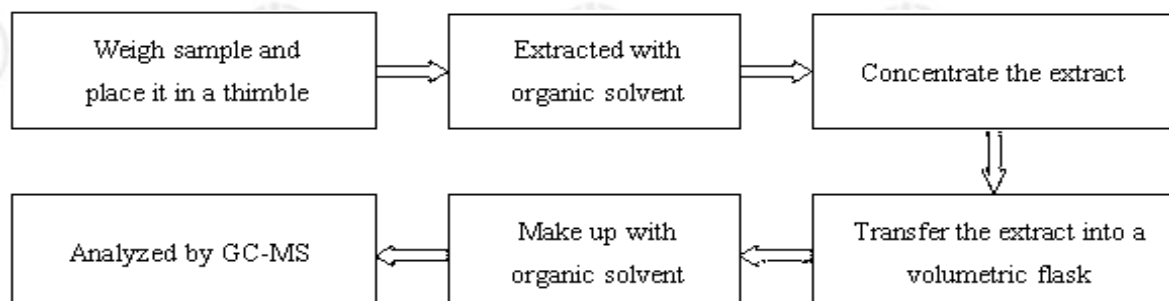
### 2. Mercury (Hg)



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



### 4. Polybrominated Biphenyl(PBBs) , Polybrominated Diphenyl Ethers(PBDEs)

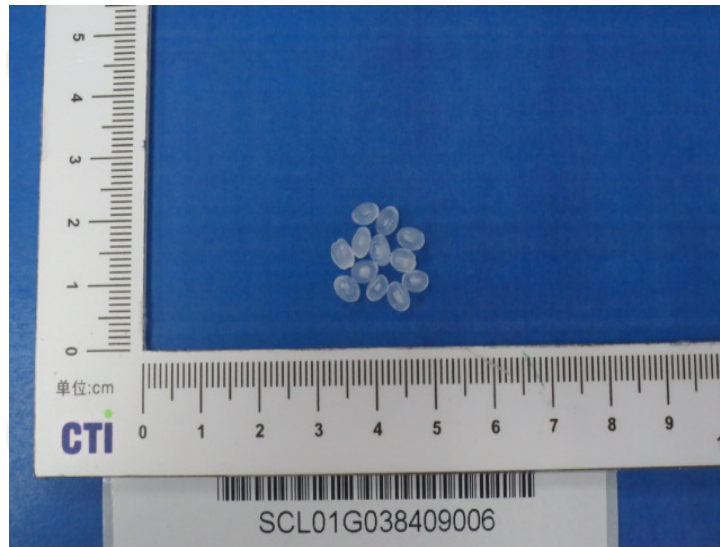


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## Photo(s) of the sample(s)



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

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