

## Test Report

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CHI MEI CORPORATION

59-1 SAN CHIA, JEN TE TAINAN COUNTY, TAIWAN



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

Sample Description : ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER  
Style/Item No. : POLYLAC® PA-757  
Sample Receiving Date : 2009/12/28  
Testing Period : 2009/12/28 TO 2010/01/06

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : With reference to IEC 62321: 2008  
Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products.

- (1) Determination of Cadmium by ICP-AES.
- (2) Determination of Lead by ICP-AES.
- (3) Determination of Mercury by ICP-AES.
- (4) Determination of Hexavalent Chromium by UV/Vis Spectrometry.
- (5) Determination of PBB and PBDE by GC/MS.

Test Result(s) : Please refer to next page(s).

Ray Chang / Asst. Manager  
Signed for and on behalf of  
SGS Taiwan Limited

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Test results by chemical method (Unit: mg/kg)

| Test Item (s):                                    | Method<br>(Refer to) | Result | MDL | RoHS<br>Limit |
|---------------------------------------------------|----------------------|--------|-----|---------------|
|                                                   |                      | No.1   |     |               |
| Cadmium (Cd)                                      | (1)                  | n.d.   | 2   | 100           |
| Lead (Pb)                                         | (2)                  | n.d.   | 2   | 1000          |
| Mercury (Hg)                                      | (3)                  | n.d.   | 2   | 1000          |
| Hexavalent Chromium Cr(VI) by alkaline extraction | (4)                  | n.d.   | 2   | 1000          |
| <b>Sum of PBBs</b>                                |                      | n.d.   | -   | 1000          |
| Monobromobiphenyl                                 |                      | n.d.   | 5   | -             |
| Dibromobiphenyl                                   |                      | n.d.   | 5   | -             |
| Tribromobiphenyl                                  |                      | n.d.   | 5   | -             |
| Tetrabromobiphenyl                                |                      | n.d.   | 5   | -             |
| Pentabromobiphenyl                                |                      | n.d.   | 5   | -             |
| Hexabromobiphenyl                                 |                      | n.d.   | 5   | -             |
| Heptabromobiphenyl                                |                      | n.d.   | 5   | -             |
| Octabromobiphenyl                                 |                      | n.d.   | 5   | -             |
| Nonabromobiphenyl                                 |                      | n.d.   | 5   | -             |
| Decabromobiphenyl                                 |                      | n.d.   | 5   | -             |
| <b>Sum of PBDEs</b>                               | (5)                  | n.d.   | -   | 1000          |
| Monobromodiphenyl ether                           |                      | n.d.   | 5   | -             |
| Dibromodiphenyl ether                             |                      | n.d.   | 5   | -             |
| Tribromodiphenyl ether                            |                      | n.d.   | 5   | -             |
| Tetrabromodiphenyl ether                          |                      | n.d.   | 5   | -             |
| Pentabromodiphenyl ether                          |                      | n.d.   | 5   | -             |
| Hexabromodiphenyl ether                           |                      | n.d.   | 5   | -             |
| Heptabromodiphenyl ether                          |                      | n.d.   | 5   | -             |
| Octabromodiphenyl ether                           |                      | n.d.   | 5   | -             |
| Nonabromodiphenyl ether                           |                      | n.d.   | 5   | -             |
| Decabromodiphenyl ether                           |                      | n.d.   | 5   | -             |

**TEST PART DESCRIPTION:**

NO.1 : NATURE ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER

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- Note :
1. mg/kg = ppm ; 0.1wt% = 1000ppm
  2. n.d. = Not Detected
  3. MDL = Method Detection Limit
  4. "-" = Not Regulated

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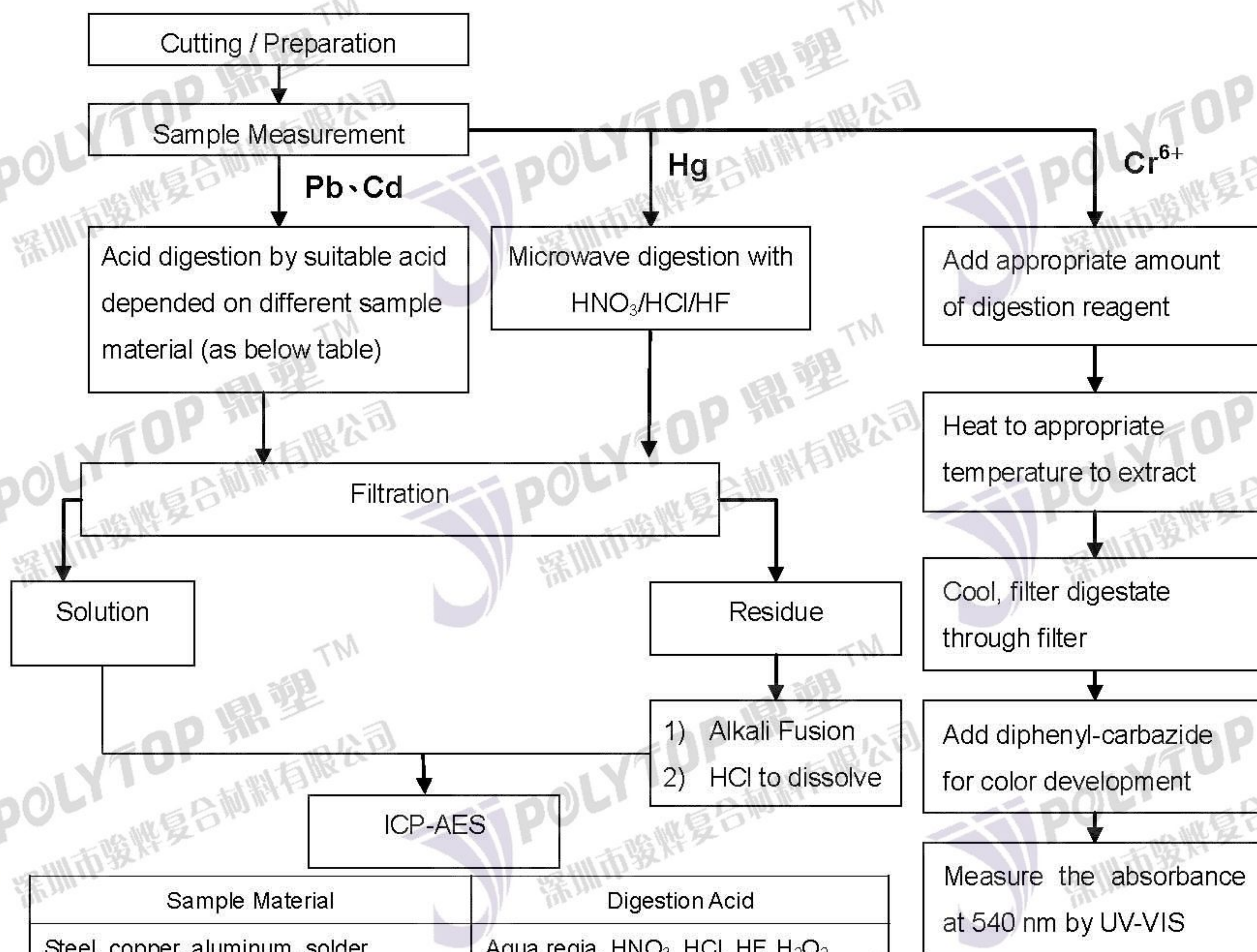
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- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Hungming Li
- 3) Name of the person in charge of measurement: Ray Chang



| Sample Material                    | Digestion Acid                                                                          |
|------------------------------------|-----------------------------------------------------------------------------------------|
| Steel, copper, aluminum, solder    | Aqua regia, HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub>                   |
| Glass                              | HNO <sub>3</sub> /HF                                                                    |
| Gold, platinum, palladium, ceramic | Aqua regia                                                                              |
| Silver                             | HNO <sub>3</sub>                                                                        |
| Plastic                            | H <sub>2</sub> SO <sub>4</sub> , H <sub>2</sub> O <sub>2</sub> , HNO <sub>3</sub> , HCl |
| Others                             | Any acid to total digestion                                                             |

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### PBB/PBDE analytical FLOW CHART

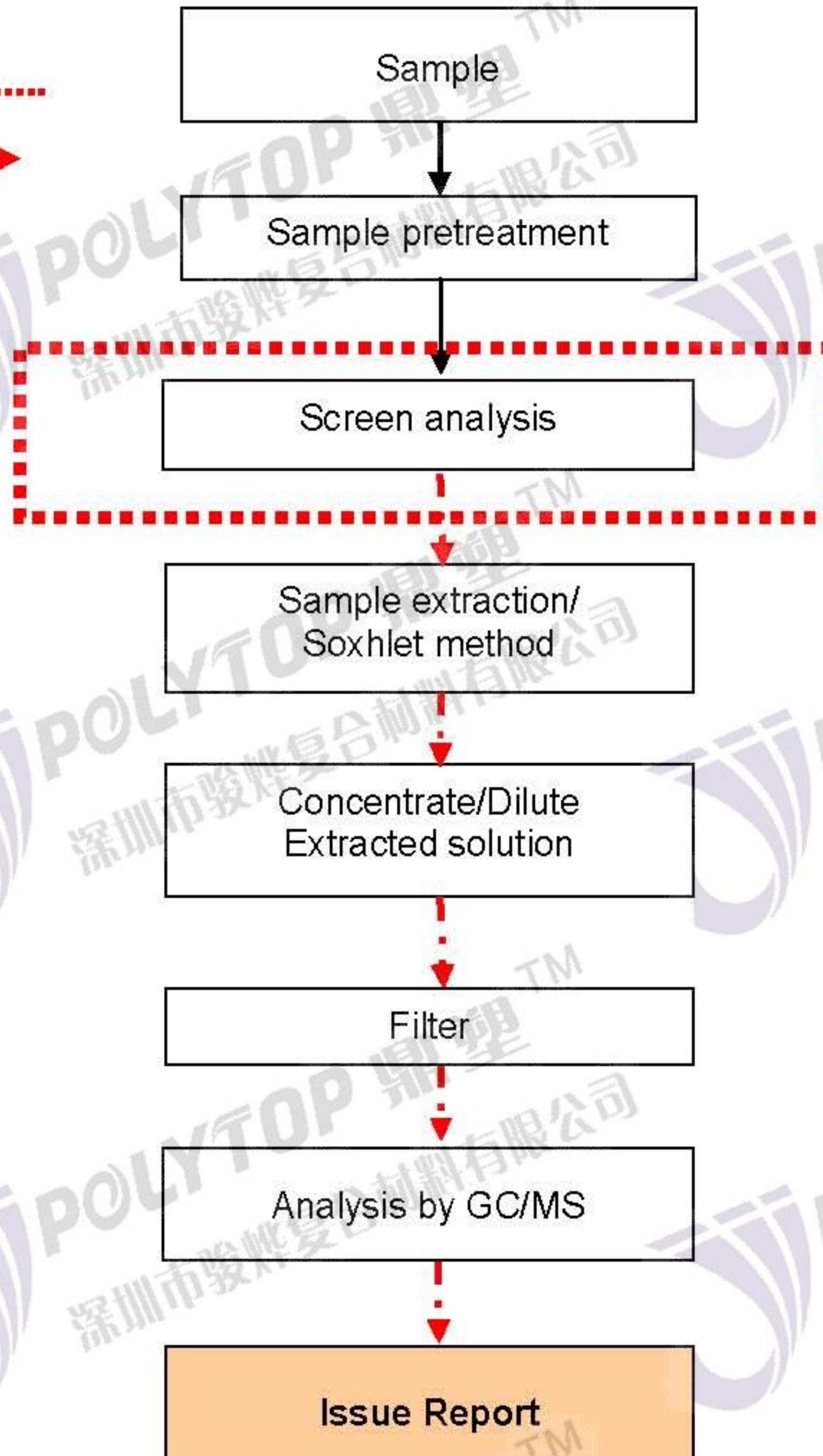
1) Name of the person who made measurement: Anson Tsao

2) Name of the person in charge of measurement: Ray Chang

First testing process

Optional screen process

Confirmation process



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**\*\* End of Report \*\***

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