

# Test Report

No.: CKGEC24000375201

Date: May 08, 2024

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Client Name: UNISEM CHENGDU CO., LTD.

Client Address: NO,8-2 KEXIN ROAD ,WEST PARK OF CHENGDU HI-TECH ZONE,611731 SICHUAN, PR CHINA

Sample Name: SLP QFN/DFN Package

The above sample(s) and information were provided by the client.

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SGS Job No.: CQP24-004350

Sample Receiving Date: Apr 28, 2024

Testing Period: Apr 28, 2024 ~ May 08, 2024

Test Requested: Select test(s) as requested by the client.

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Chongqing) Co., Ltd.

\_\_\_\_\_  
Mary Zou  
Approved Signatory

scan to see the report



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## Test Result(s):

### Test Part Description

| SN ID | Sample No. | SGS Sample ID           | Description           |
|-------|------------|-------------------------|-----------------------|
| SN1   | A1         | CKG24-0003752-0001.C001 | "SLP QFN/DFN Package" |

### Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

**EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)**

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-

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| Test Item(s)                            | Limit | Unit(s) | MDL | A1 |
|---|-------|---------|-----|----|
| Octabrominated diphenyl ether (OctaBDE) | -     | mg/kg   | 5   | ND |
| Nonabrominated diphenyl ether (NonaBDE) | -     | mg/kg   | 5   | ND |

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|  |             |
|--|-------------|
| Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)   | 29457-72-5  |
| Sodium perfluorooctanesulfonate (PFOS-Na)  | 4021-47-0   |
| Ammonium perfluorooctanesulfonate (PFOS-NH <sub>4</sub> )  | 29081-56-9  |
| Perfluorooctane sulfonate diethanolamine salt (PFOS-NH <sub>2</sub> (C <sub>2</sub> H <sub>4</sub> OH) <sub>2</sub> )  | 70225-14-8  |
| Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )   | 56773-42-3  |
| N-decyl-N,N-dimethyldecyl-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate (PFOS-N(C <sub>10</sub> H <sub>21</sub> ) <sub>2</sub> (CH <sub>3</sub> ) <sub>2</sub> ) | 251099-16-8 |
| Perfluorooctane Sulfonyl fluoride (PFOS-F)   | 307-35-7    |
| Magnesium bis(heptadecafluorooctanesulphonate) (PFOS)  |             |
| Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate (PFOS)  |             |
| <b>PFOSA, its salts</b>  |             |
| Perfluorooctane Sulfonamide (PFOSA)  |             |
| Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)   |             |

In-House Method, analysis was performed by ICP-OES/AAS.

|               | Unit(s) | MDL |    |
|---------------|---------|-----|----|
| Beryllium(Be) | mg/kg   | 5   | ND |
| Antimony(Sb)  | mg/kg   | 10  | ND |

## Halogen

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

| Test Item(s) | Unit(s) | MDL |    |
|--------------|---------|-----|----|
| Fluorine(F)  | mg/kg   | 20  | ND |

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| Test Item(s) | CAS No. | Unit(s) | MDL | A1 |
|--------------|---------|---------|-----|----|
|--------------|---------|---------|-----|----|



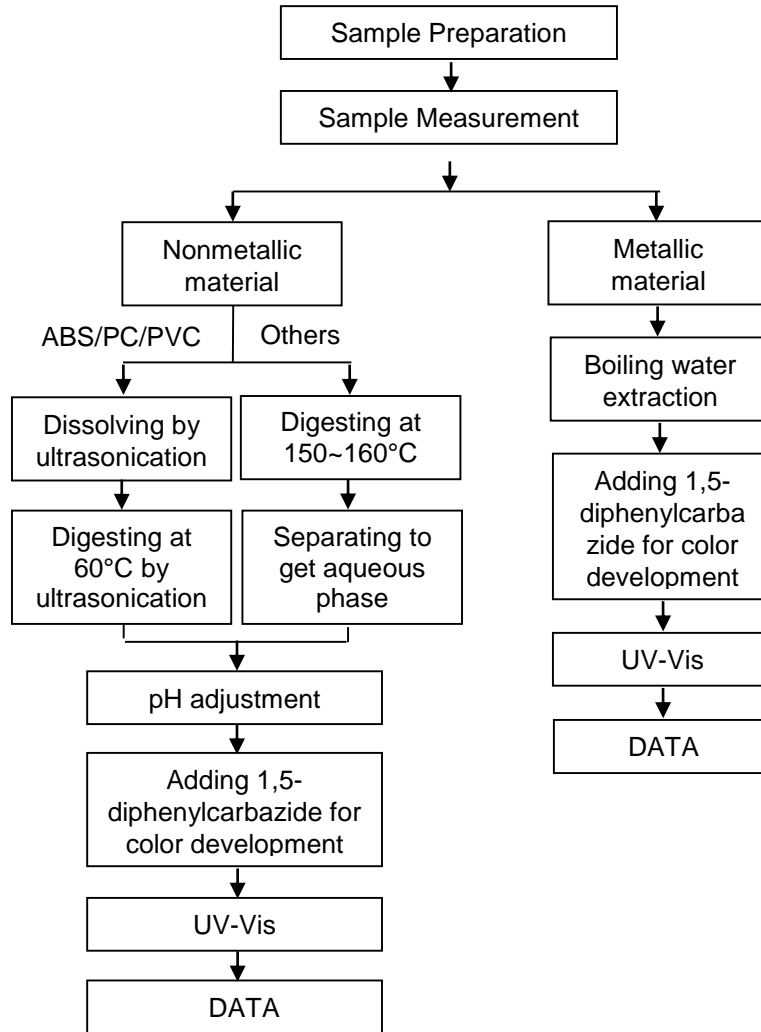
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Hexavalent Chromium (Cr(VI)) Testing Flow Chart



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## ATTACHMENTS

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### PBB/PBDE Testing Flow Chart



**Phthalates Testing Flow Chart**

Sample cutting/preparation

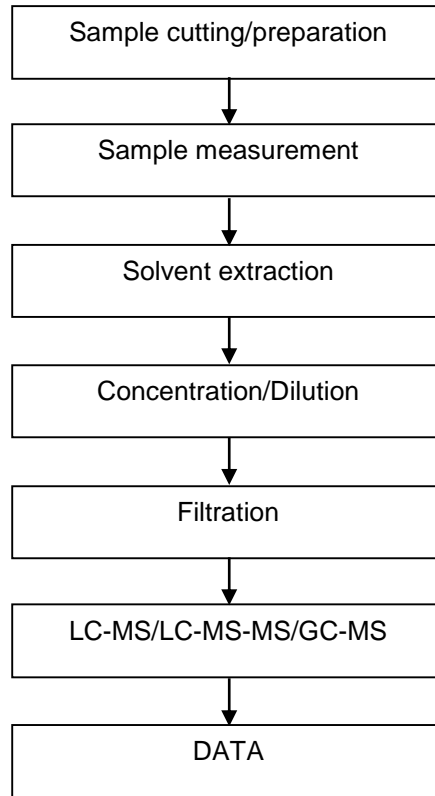


Sample measurement

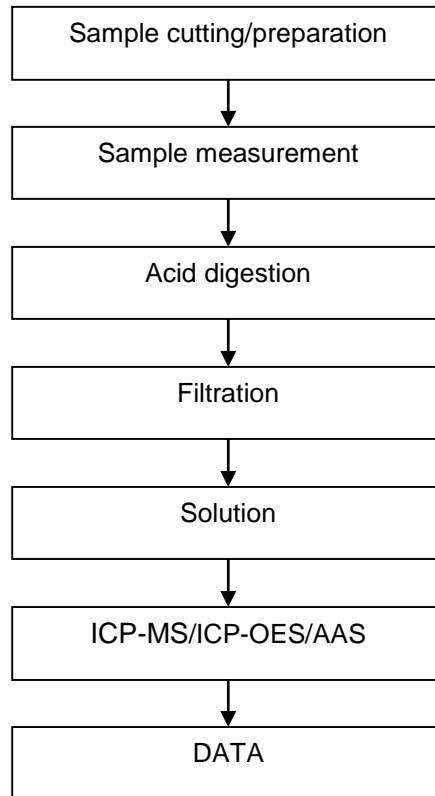


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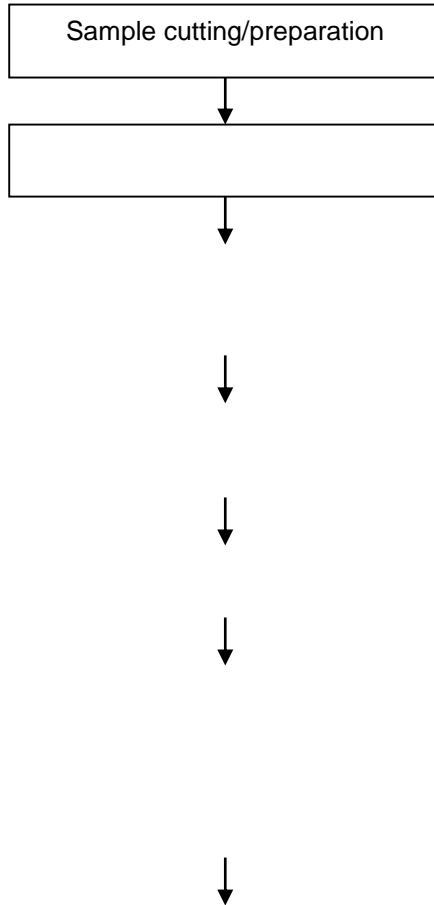
**PFASs/ PFOS/PFOA Testing Flow Chart**



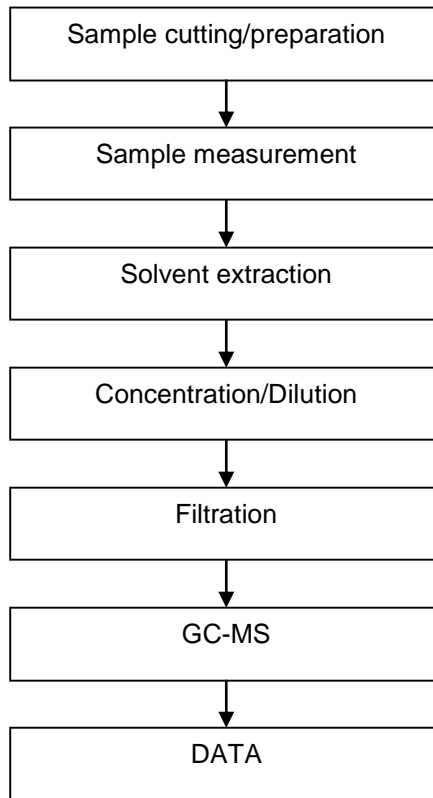
**Elements Testing Flow Chart**



**Halogen Testing Flow Chart**



**HBCDD Testing Flow Chart**



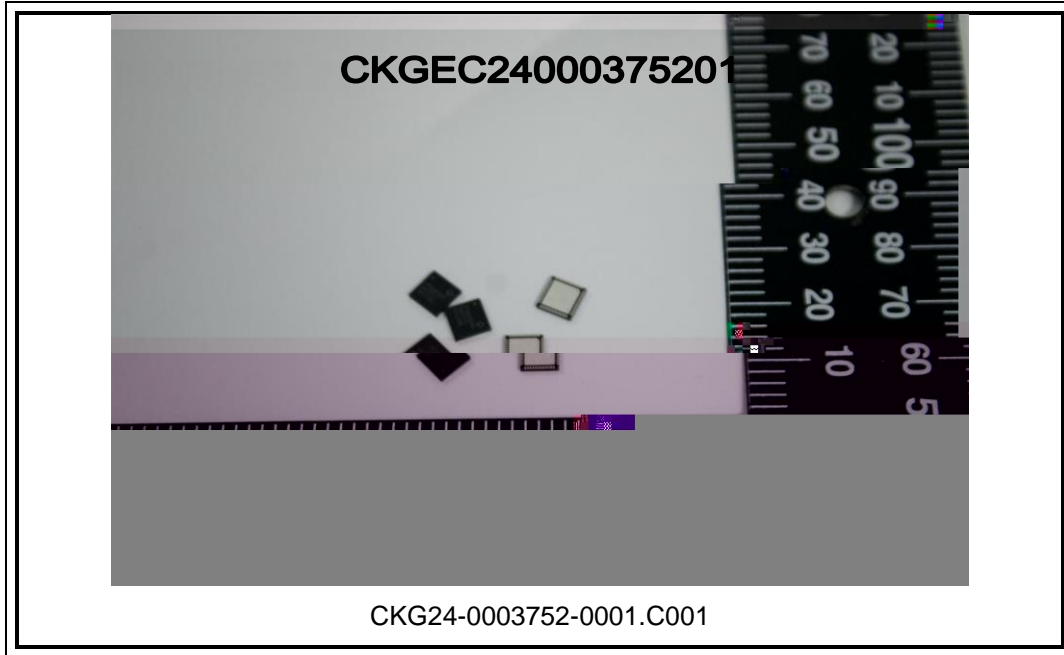
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Sample Photo:



SGS authenticate the photo on original report only  
\*\*\* End of Report \*\*\*