

**Test Report No.:** CANEC24001784134 **Date:** Jan 31, 2024 Page 1 of 13

Client Name: SHENGYI TECHNOLOGY CO.,LTD.

Client Address: NO.5, WEST INDUSTRY ROAD, SONGSHAN LAKE, DONGGUAN, GUANGDONG

**PROVINCE** 

Sample Name: Prepreg Model No.: S0101

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

SGS Job No.: GZP24-002274 Sample Receiving Date: Jan 23, 2024

Testing Period: Jan 23, 2024 ~ Jan 31, 2024

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

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

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

| Test Requirement  | Conclusion  |
|---|-------------|
| 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) | Pass        |
| Perfluorooctane Sulfonates (PFOS) and its derivatives and Perfluorooctanoic Acid (PFOA) and its salts   | See Results |
| Element(s)  | See Results |
| Hexabromocyclododecane (HBCDD)  | See Results |
| Phthalates  | See Results |

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Zm Guan

Approved Signatory

Luguan





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#### Test Result(s):

Test Part Description:

| SN ID | Sample No. | SGS Sample ID           | Description |
|-------|------------|-------------------------|-------------|
| SN1   | A3         | CAN24-0017841-0001.C003 | White sheet |

#### 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-OES/AAS, UV-

Vis and GC-MS.

| Test Item(s)                              | Limit | Unit(s) | MDL | A3 |
|---|-------|---------|-----|----|
| Lead (Pb)                                 | 1000  | mg/kg   | 2   | 17 |
| Mercury (Hg)                              | 1000  | mg/kg   | 2   | ND |
| Cadmium (Cd)                              | 100   | mg/kg   | 2   | ND |
| Hexavalent Chromium (Cr(VI))              | 1000  | mg/kg   | 8   | ND |
| Polybrominated biphenyls (PBB)            | 1000  | mg/kg   | -   | ND |
| Monobrominated biphenyl (MonoBB)          | -     | mg/kg   | 5   | ND |
| Dibrominated biphenyl (DiBB)              | -     | mg/kg   | 5   | ND |
| Tribrominated biphenyl (TriBB)            | -     | mg/kg   | 5   | ND |
| Tetrabrominated biphenyl (TetraBB)        | -     | mg/kg   | 5   | ND |
| Pentabrominated biphenyl (PentaBB)        | -     | mg/kg   | 5   | ND |
| Hexabrominated biphenyl (HexaBB)          | -     | mg/kg   | 5   | ND |
| Heptabrominated biphenyl (HeptaBB)        | -     | mg/kg   | 5   | ND |
| Octabrominated biphenyl (OctaBB)          | -     | mg/kg   | 5   | ND |
| Nonabrominated biphenyl (NonaBB)          | -     | mg/kg   | 5   | ND |
| Decabrominated biphenyl (DecaBB)          | -     | mg/kg   | 5   | ND |
| Polybrominated diphenyl ethers (PBDE)     | 1000  | mg/kg   | -   | ND |
| Monobrominated diphenyl ether (MonoBDE)   | -     | mg/kg   | 5   | ND |
| Dibrominated diphenyl ether (DiBDE)       | -     | mg/kg   | 5   | ND |
| Tribrominated diphenyl ether (TriBDE)     | -     | mg/kg   | 5   | ND |
| Tetrabrominated diphenyl ether (TetraBDE) | -     | mg/kg   | 5   | ND |
| Pentabrominated diphenyl ether (PentaBDE) | -     | mg/kg   | 5   | ND |
| Hexabrominated diphenyl ether (HexaBDE)   | -     | mg/kg   | 5   | ND |
| Heptabrominated diphenyl ether (HeptaBDE) | -     | mg/kg   | 5   | ND |



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| Test Item(s)                            | Limit | Unit(s) | MDL | A3 |
|---|-------|---------|-----|----|
| Octabrominated diphenyl ether (OctaBDE) | -     | mg/kg   | 5   | ND |
| Nonabrominated diphenyl ether (NonaBDE) | -     | mg/kg   | 5   | ND |
| Decabrominated diphenyl ether (DecaBDE) | -     | mg/kg   | 5   | ND |
| Bis(2-ethylhexyl) phthalate (DEHP)      | 1000  | mg/kg   | 50  | ND |
| Butyl benzyl phthalate (BBP)            | 1000  | mg/kg   | 50  | ND |
| Dibutyl phthalate (DBP)                 | 1000  | mg/kg   | 50  | ND |
| Diisobutyl phthalate (DIBP)             | 1000  | mg/kg   | 50  | ND |

#### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

### <u>Perfluorooctane Sulfonates (PFOS) and its derivatives and Perfluorooctanoic Acid (PFOA) and its salts</u>

Test Method: Modified CEN/TS 15968:2010, analysis was performed by HPLC-MS or LC-MS/MS.

| Test Item(s)  | CAS No.    | Unit(s) | MDL   | A3 |
|---|------------|---------|-------|----|
| PFOS and its derivatives  |            | mg/kg   | IVIDE | ND |
| Perfluorooctane Sulfonates (PFOS) and its salts*                      | 1763-23-1  | mg/kg   | 0.010 | ND |
| N-ethylperfluoro-1-octanesulfonamide (N-EtFOSA)                       | 4151-50-2  | mg/kg   | 0.010 | ND |
| N-methylperfluoro-1-octanesulfonamide (N-MeFOSA)                      | 31506-32-8 | mg/kg   | 0.010 | ND |
| 2-(N-ethylperfluoro-1-<br>octanesulfonamido) -ethanol (N-<br>EtFOSE)  | 1691-99-2  | mg/kg   | 0.010 | ND |
| 2-(N-methylperfluoro-1-<br>octanesulfonamido) -ethanol (N-<br>MeFOSE) | 24448-09-7 | mg/kg   | 0.010 | ND |
| Perfluorooctane Sulfonamide (PFOSA)                                   | 754-91-6   | mg/kg   | 0.010 | ND |
| Perfluorooctanoic Acid (PFOA) and its salts*                          | 335-67-1   | mg/kg   | 0.010 | ND |

#### Notes:

(1) Perfluorooctanoic acid (PFOA) and its salts\* including PFOA (CAS No. 335-67-1), APFO (CAS No. 3825-26-1), PFOA-Na (CAS No. 335-95-5), PFOA-K (CAS No. 2395-00-8), PFOA-Ag (CAS No. 335-93-3) and PFOA-F (CAS No. 335-66-0). The result of PFOA is used to represent PFOA and its salts.

(2) Perfluorooctane sulfonates (PFOS) and its salts\* including PFOS (CAS No. 1763-23-1), POSF(CAS No. 307-35-7), PFOS-K (CAS No. 2795-39-3), PFOS-NH<sub>4</sub> (CAS No. 29081-56-9), PFOS-N( $C_{10}H_{21}$ )<sub>2</sub>(CH<sub>3</sub>)<sub>2</sub> (CAS No. 251099-16-8), PFOS-NH<sub>2</sub>( $C_{2}H_{4}OH$ )<sub>2</sub> (CAS No. 70225-14-8), PFOS-Li (CAS No. 29457-72-5), PFOS-N( $C_{2}H_{5}$ )<sub>4</sub> (CAS No. 56773-42-3) and PFOS-Na (CAS No. 4021-47-0). The result of PFOS is used to represent PFOS and its salts.



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### Element(s)

Test Method: With reference to US EPA 3052:1996, analysis was performed by ICP-OES/AAS.

| Test Item(s)  | Unit(s) | MDL | A3 |
|---------------|---------|-----|----|
| Beryllium(Be) | mg/kg   | 5   | ND |
| Antimony(Sb)  | mg/kg   | 10  | ND |

### **Hexabromocyclododecane (HBCDD)**

Test Method: With reference to IEC 62321-9:2021, analysis was performed by GC-MS.

| Test Item(s)                              | CAS No.      | Unit(s) | MDL | A3 |
|---|--------------|---------|-----|----|
|   | 134237-50-6  |         |     |    |
| Hexabromocyclododecane (HBCDD)            | /134237-51-7 |         |     |    |
| and all major diastereoisomers identified | /134237-52-8 | mg/kg   | 20  | ND |
| (α-HBCDD, β-HBCDD, γ-HBCDD)               | /25637-99-4  |         |     |    |
|   | /3194-55-6   |         |     |    |

### **Phthalates**

Test Method: With reference to EN 14372:2004, analysis was performed by GC-MS.

| Test Item(s)   | CAS No.                   | Unit(s) | MDL   | A3 |
|--|---------------------------|---------|-------|----|
| Dibutyl Phthalate(DBP)   | 84-74-2                   | %       | 0.003 | ND |
| Benzyl Butyl Phthalate(BBP)  | 85-68-7                   | %       | 0.003 | ND |
| Bis-(2-ethylhexyl) Phthalate(DEHP)   | 117-81-7                  | %       | 0.003 | ND |
| Diisononyl Phthalate (DINP)  | 28553-12-0<br>/68515-48-0 | %       | 0.010 | ND |
| Di-n-Octyl Phthalate(DNOP)   | 117-84-0                  | %       | 0.003 | ND |
| Diisodecyl Phthalate (DIDP)  | 26761-40-0<br>/68515-49-1 | %       | 0.010 | ND |
| Dimethyl Phthalate(DMP)  | 131-11-3                  | %       | 0.003 | ND |
| Diisobutyl Phthalate(DIBP)   | 84-69-5                   | %       | 0.003 | ND |
| Dipentyl Phthalates (DnPP)   | 131-18-0                  | %       | 0.003 | ND |
| Di-n-Hexyl Phthalate(DnHP)   | 84-75-3                   | %       | 0.003 | ND |
| Bis(2-methoxyethyl)phthalate(DMEP)   | 117-82-8                  | %       | 0.003 | ND |
| Diisopentyl Phthalate(DIPP)  | 605-50-5                  | %       | 0.003 | ND |
| n-pentyl Isopentyl Phthalate(nPIPP)  | 776297-69-9               | %       | 0.003 | ND |
| 1,2-Benzenedicarboxylic Acid,di-C6-8-branched alkyl esters,C7-rich(DIHP)             | 71888-89-6                | %       | 0.010 | ND |
| 1,2-Benzenedicarboxylic Acid,Di-C7-11-<br>Branched and Linear Alkyl<br>Esters(DHNUP) | 68515-42-4                | %       | 0.010 | ND |
| 1,2-Benzenedicarboxylic Acid,Dipentyl Ester,Branched and Linear                      | 84777-06-0                | %       | 0.010 | ND |
| 1,2-benzenedicarboxylic Acid,dihexyl ester branched and linear(DHxP)                 | 68515-50-4                | %       | 0.010 | ND |



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Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (*w*=0) stated in ILAC-G8:09/2019.



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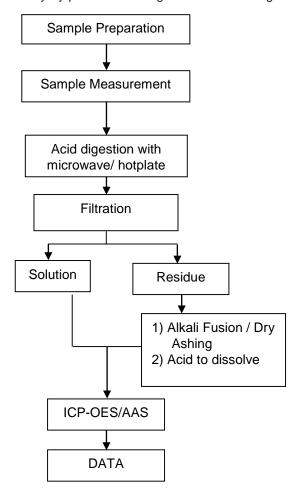


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### **Elements Testing Flow Chart**

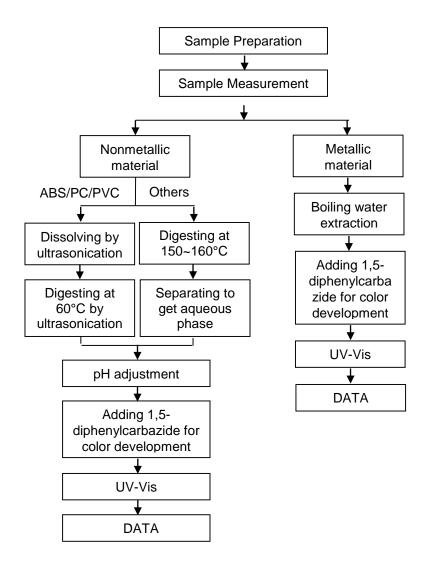
These samples were dissolved totally by pre-conditioning method according to below flow chart.







### Hexavalent Chromium (Cr(VI)) Testing Flow Chart





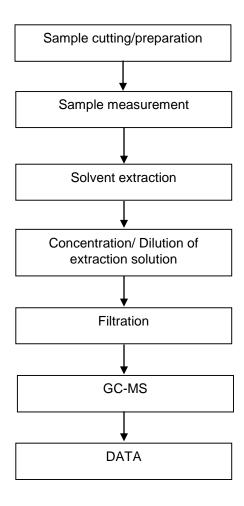
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### **PBB/PBDE Testing Flow Chart**





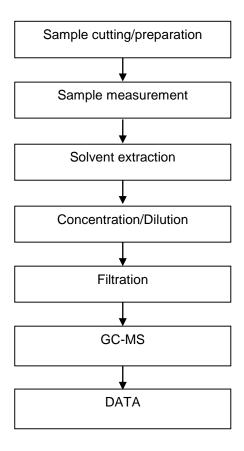
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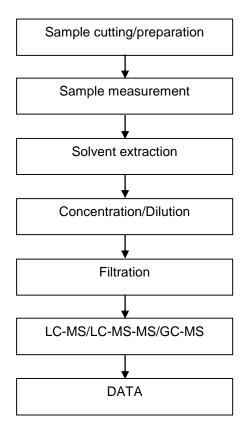
### **Phthalates Testing Flow Chart**







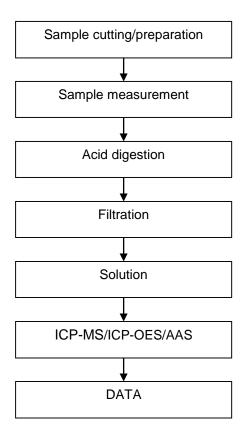
### PFASs/ PFOS/PFOA Testing Flow Chart







### **Elements Testing Flow Chart**





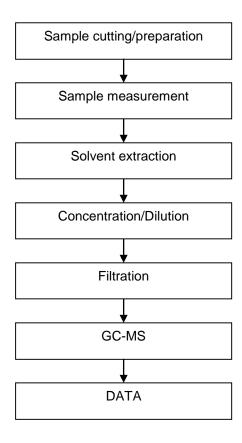
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### **HBCDD Testing Flow Chart**

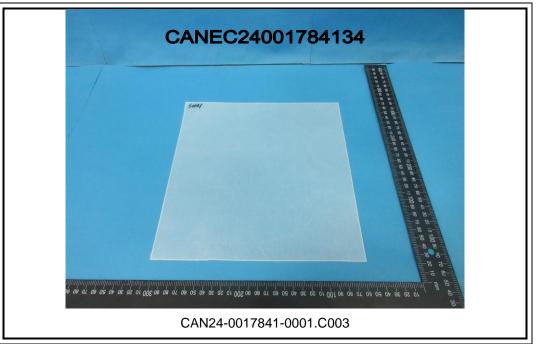






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Sample Photo:



SGS authenticate the photo on original report only

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

