

## TEST REPORT

APPLICANT : LG Chem, Ltd.  
ADDRESS : 55, Yeosusandan 2-ro,  
Yeosu-si, Jeollanam-do, Korea

PAGE: 1 of 5

REPORT NO. RT24R-S8691-001-E-R

DATE: Jan. 31, 2025

SAMPLE DESCRIPTION : The following submitted sample(s) said to be:-

NAME/TYPE OF PRODUCT : HF380  
SAMPLE ID NO. : RT24R-S8691-001  
ITEM NO. : All Color  
MANUFACTURER/VENDOR : LG Chem, Ltd.

SAMPLE RECEIVED : Dec. 23, 2024  
TESTING DATE : Dec. 23, 2024 ~ Jan. 03, 2025

TEST METHOD(S) : Please see the following page(s).  
TEST RESULT(S) : Please see the following page(s).

- \* Note 1 : The test results presented in this report refer only to the object tested.
- \* Note 2 : This report shall not be reproduced except in full without the written approval of the testing laboratory.
- \* Note 3 : The item no. is assigned by client and indicated according to their requirement and guarantee letter.

Approved by,



Nikkie Lee / Lab. Technical Manager

Authorized by,



Jade Jang / Lab. General Manager



Authenticity check

Intertek Testing Services Korea Ltd.

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DATE: Jan. 31, 2025

SAMPLE ID NO. : RT24R-S8691-001

SAMPLE DESCRIPTION : HF380

| TEST ITEM                               | UNIT  | TEST METHOD                                                                                                                                 | MDL | RESULT |
|-----------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------|-----|--------|
| Cadmium (Cd)                            | mg/kg | With reference to<br>IEC 62321-5 Edition 1.0 : 2013,<br>by acid digestion and<br>determined by ICP-OES                                      | 0.5 | N.D.   |
| Lead (Pb)                               | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Mercury (Hg)                            | mg/kg | With reference to<br>IEC 62321-4 : 2013/AMD1 :<br>2017, by acid digestion and<br>determined by ICP-OES                                      | 2   | N.D.   |
| Hexavalent Chromium (Cr <sup>6+</sup> ) | mg/kg | With reference to<br>IEC 62321-7-2<br>Edition 1.0 : 2017,<br>by alkaline/toluene digestion<br>and determined by UV-VIS<br>Spectrophotometer | 8   | N.D.   |
| Polybrominated Biphenyl (PBBs)          |       |                                                                                                                                             |     |        |
| Monobromobiphenyl                       | mg/kg | With reference to<br>IEC 62321-6 Edition 1.0 : 2015,<br>by solvent extraction and<br>determined by GC/MS                                    | 5   | N.D.   |
| Dibromobiphenyl                         | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Tribromobiphenyl                        | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Tetrabromobiphenyl                      | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Pentabromobiphenyl                      | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Hexabromobiphenyl                       | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Heptabromobiphenyl                      | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Octabromobiphenyl                       | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Nonabromobiphenyl                       | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Decabromobiphenyl                       | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Polybrominated Diphenyl Ether (PBDEs)   |       |                                                                                                                                             |     |        |
| Monobromodiphenyl ether                 | mg/kg | With reference to<br>IEC 62321-6 Edition 1.0 : 2015,<br>by solvent extraction and<br>determined by GC/MS                                    | 5   | N.D.   |
| Dibromodiphenyl ether                   | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Tribromodiphenyl ether                  | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Tetrabromodiphenyl ether                | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Pentabromodiphenyl ether                | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Hexabromodiphenyl ether                 | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Heptabromodiphenyl ether                | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Octabromodiphenyl ether                 | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Nonabromodiphenyl ether                 | mg/kg |                                                                                                                                             | 5   | N.D.   |
| Decabromodiphenyl ether                 | mg/kg |                                                                                                                                             | 5   | N.D.   |

Tested by : Jooyeon Lee, Chano Kim, Hayan Park

Notes : mg/kg = ppm = parts per million  
< = Less than  
N.D. = Not detected ( <MDL )  
MDL = Method detection limit

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DATE: Jan. 31, 2025

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SAMPLE ID NO. : RT24R-S8691-001

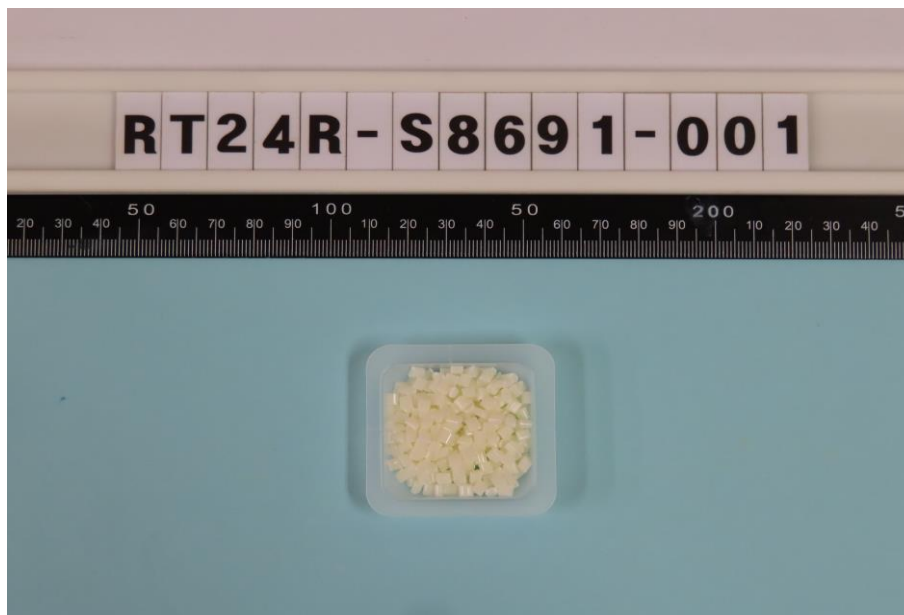
SAMPLE DESCRIPTION : HF380

| TEST ITEM                         | CAS NO.  | UNIT  | TEST METHOD                                                                                     | MDL | RESULT |
|-----------------------------------|----------|-------|-------------------------------------------------------------------------------------------------|-----|--------|
| Dibutyl phthalate (DBP)           | 84-74-2  | mg/kg | With reference to IEC 62321-8 Edition 1.0 : 2017, by solvent extraction and determined by GC/MS | 50  | N.D.   |
| Di(2-ethylhexyl) phthalate (DEHP) | 117-81-7 | mg/kg |                                                                                                 | 50  | N.D.   |
| Benzyl butyl phthalate (BBP)      | 85-68-7  | mg/kg |                                                                                                 | 50  | N.D.   |
| Diisobutyl phthalate (DIBP)       | 84-69-5  | mg/kg |                                                                                                 | 50  | N.D.   |

Tested by : Hayan Park

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\* View of sample as received;-



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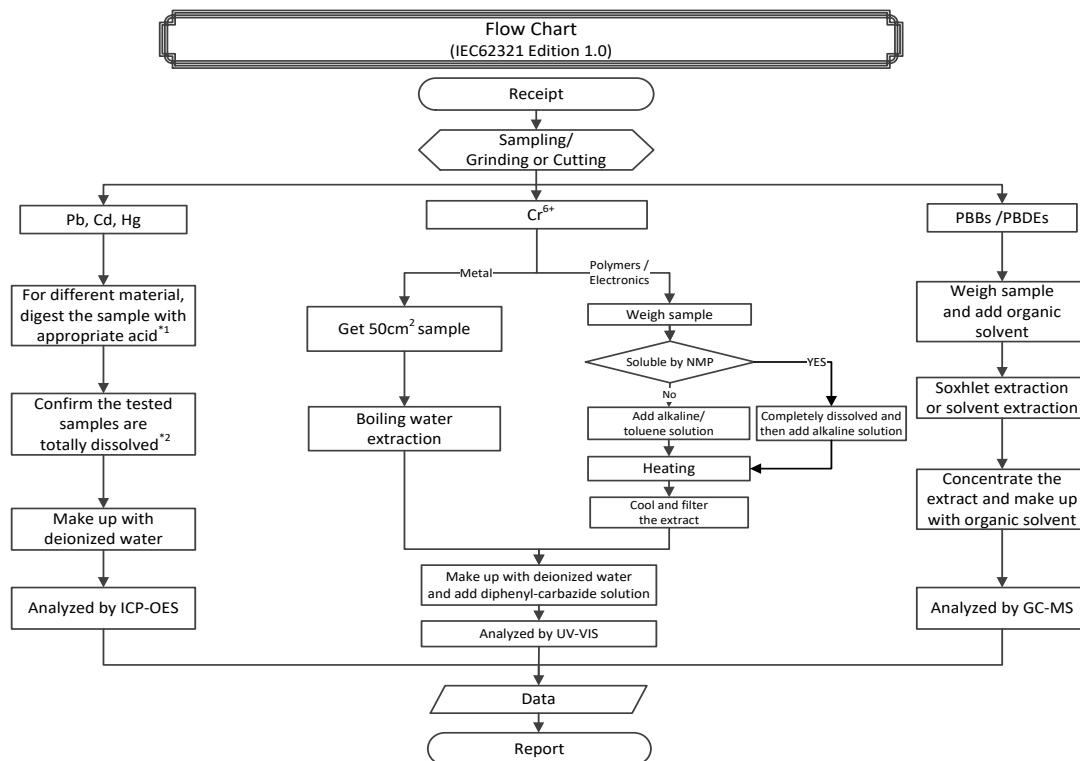
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SAMPLE ID NO. : RT24R-S8691-001

SAMPLE DESCRIPTION : HF380



Remarks :

\*1 : List of appropriate acid :

| Material    | Acid added for digestion                                                                   |
|-------------|--------------------------------------------------------------------------------------------|
| Polymers    | HNO <sub>3</sub> , HCl, HF, H <sub>2</sub> O <sub>2</sub> , H <sub>3</sub> BO <sub>3</sub> |
| Metals      | HNO <sub>3</sub> , HCl, HF                                                                 |
| Electronics | HNO <sub>3</sub> , HCl, H <sub>2</sub> O <sub>2</sub> , HBF <sub>4</sub>                   |

\*2 : The samples were dissolved totally by pre-conditioning method according to above flow chart.

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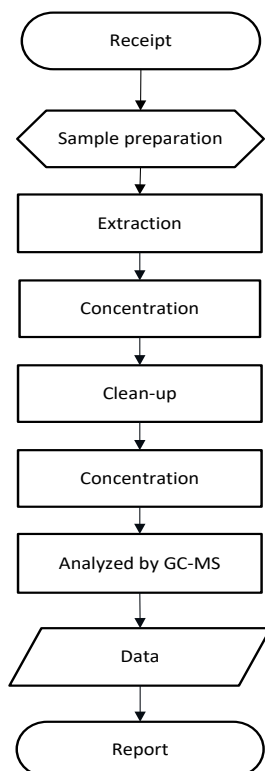
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### Flow Chart (Phthalates)



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

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