

APPLICANT : KOREA-TAU

ADDRESS: 204, Seongyeon-ro, Seongyeon-myeon,

Seosan-si, Chungcheongnam-do, Korea

PAGE: 1 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

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

NAME/TYPE OF PRODUCT : HT-Z1

SAMPLE ID NO. : RT21R-S2848 MANUFACTURER/VENDOR : KOREA-TAU

SAMPLE RECEIVED : Apr. 29, 2021

TESTING DATE : Apr. 29, 2021 ~ May 06, 2021

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.

Approved by,

Authorized by,

Authenticity check

Jade Jang / Lab. Technical Manager

Bo Park / Lab. General Manager

Intertek Testing Services Korea Ltd.





<sup>\*</sup> Note 2: This report shall not be reproduced except in full without the written approval of the testing laboratory.



PAGE: 2 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848

SAMPLE DESCRIPTION: HT-Z1

| TEST ITEM                               | UNIT  | TEST METHOD   | MDL | RESULT |
|---|-------|---|-----|--------|
| Cadmium (Cd)                            | mg/kg | With reference to IEC 62321-5 Edition 1.0 : 2013,   | 0.5 | N.D.   |
| Lead (Pb)                               | mg/kg | by acid digestion and determined by ICP-OES   | 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 IEC 62321-7-2 Edition 1.0: 2017, by alkaline/toluene digestion and determined by UV-VIS Spectrophotometer | 8   | N.D.   |
| Polybrominated Biphenyl (PBBs)          | 1     |   |     |        |
| Monobromobiphenyl                       | mg/kg |   | 5   | N.D.   |
| Dibromobiphenyl                         | mg/kg |   | 5   | N.D.   |
| Tribromobiphenyl                        | mg/kg |   | 5   | N.D.   |
| Tetrabromobiphenyl                      | mg/kg | With reference to   | 5   | N.D.   |
| Pentabromobiphenyl                      | mg/kg | IEC 62321-6 Edition 1.0 : 2015,   | 5   | N.D.   |
| Hexabromobiphenyl                       | mg/kg | by solvent extraction and   | 5   | N.D.   |
| Heptabromobiphenyl                      | mg/kg | determined by GC/MS   | 5   | N.D.   |
| Octabromobiphenyl                       | mg/kg |   | 5   | N.D.   |
| Nonabromobiphenyl                       | mg/kg |   | 5   | N.D.   |
| Decabromobiphenyl                       | mg/kg |   | 5   | N.D.   |
| Polybrominated Diphenyl Ether (         |       | ,   |     |        |
| Monobromodiphenyl ether                 | mg/kg |   | 5   | N.D.   |
| Dibromodiphenyl ether                   | mg/kg |   | 5   | N.D.   |
| Tribromodiphenyl ether                  | mg/kg |   | 5   | N.D.   |
| Tetrabromodiphenyl ether                | mg/kg | With reference to   | 5   | N.D.   |
| Pentabromodiphenyl ether                | mg/kg | IEC 62321-6 Edition 1.0 : 2015,   | 5   | N.D.   |
| Hexabromodiphenyl ether                 | mg/kg | by solvent extraction and   | 5   | N.D.   |
| Heptabromodiphenyl ether                | mg/kg | determined by GC/MS   | 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

Intertek Testing Services Korea Ltd.







PAGE: 3 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848

SAMPLE DESCRIPTION: HT-Z1

| TEST ITEM                        | UNIT  | TEST METHOD   | MDL   | RESULT |
|----------------------------------|-------|---|-------|--------|
| Bromine (Br)                     | mg/kg | With reference to EN 14582,<br>by oxygen combustion with<br>bomb and determined by IC                       | 30    | N.D.   |
| Chlorine (CI)                    | mg/kg | With reference to EN 14582,<br>by oxygen combustion with<br>bomb and determined by IC                       | 30    | N.D.   |
| Arsenic (As)                     | mg/kg | With reference to US EPA<br>3052, by acid digestion and<br>determined by ICP-OES                            | 2     | N.D.   |
| Beryllium (Be)                   | mg/kg | With reference to US EPA<br>3052, by acid digestion and<br>determined by ICP-OES                            | 2     | N.D.   |
| Antimony (Sb)                    | mg/kg | With reference to US EPA<br>3052, by acid digestion and<br>determined by ICP-OES                            | 2     | N.D.   |
| Perfluorooctanoic acid<br>(PFOA) | mg/kg | With reference to US EPA<br>3550C/8321B, by ultrasonic<br>extraction and determined<br>by LC/MS or LC/MS/MS | 0.025 | N.D.   |
| Perfluorooctane sulfonate (PFOS) | mg/kg | With reference to US EPA<br>3550C/8321B, by ultrasonic<br>extraction and determined<br>by LC/MS or LC/MS/MS | 0.1   | N.D.   |

Tested by : Hyojoo Kim, Jooyeon Lee, Hayan Park

Notes: mg/kg = ppm = parts per million

< = Less than

N.D. = Not detected ( <MDL )
MDL = Method detection limit

Intertek Testing Services Korea Ltd.







PAGE: 4 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848 SAMPLE DESCRIPTION : HT-Z1

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

Tested by : Hayan Park

Notes: mg/kg = ppm = parts per million

< = Less than

N.D. = Not detected ( <MDL )
MDL = Method detection limit

\* View of sample as received;-



Intertek Testing Services Korea Ltd.







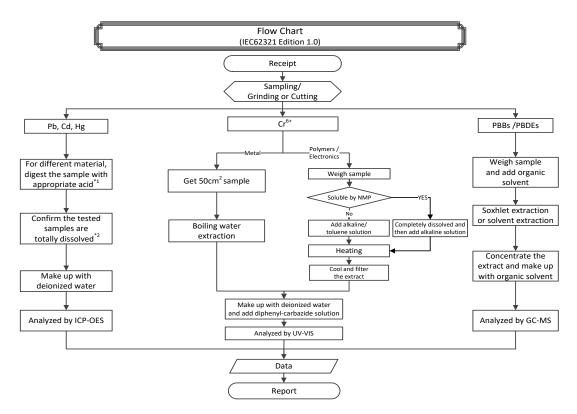
PAGE: 5 of 9

DATE: May 06, 2021

REPORT NO. RT21R-S2848-E

SAMPLE ID NO. : RT21R-S2848

SAMPLE DESCRIPTION: HT-Z1



Remarks:
\*1: List of appropriate acid:

| - : | 1. List of appropriate acid. |  |  |  |  |  |
|-----|------------------------------|--|--|--|--|--|
|     | Material                     | Acid added for digestion                             |  |  |  |  |
|     | Polymers                     | HNO₃, HCl, HF, H <sub>2</sub> O <sub>2</sub> , H3BO₃ |  |  |  |  |
|     | Metals                       | HNO₃, HCl, HF  |  |  |  |  |
|     | Electronics                  | HNO₃, HCl, H₂O₂, HBF₄                                |  |  |  |  |

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

Intertek Testing Services Korea Ltd.



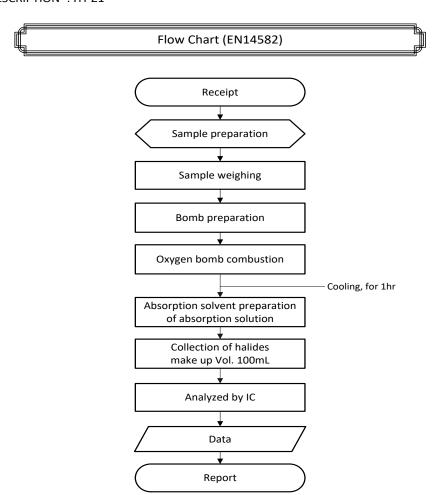




PAGE: 6 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848 SAMPLE DESCRIPTION : HT-Z1



#### Intertek Testing Services Korea Ltd.



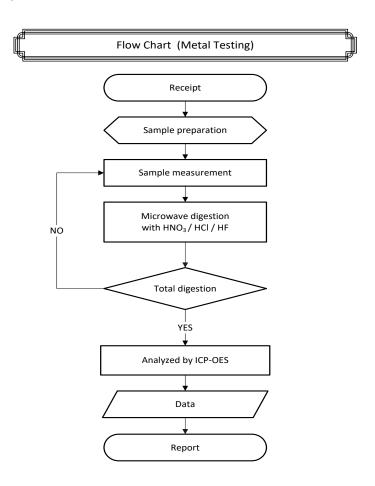




PAGE: 7 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848 SAMPLE DESCRIPTION : HT-Z1



<sup>\*\*</sup> Remarks : The samples were dissolved totally by pre-conditioning method according to above flow chart.

Intertek Testing Services Korea Ltd.





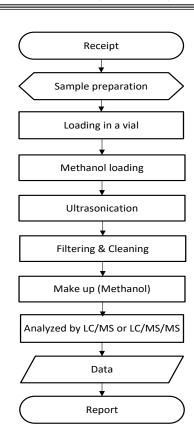


PAGE: 8 of 9

REPORT NO. RT21R-S2848-E DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848 SAMPLE DESCRIPTION : HT-Z1

Flow Chart (PFOS, PFOA)



Intertek Testing Services Korea Ltd.







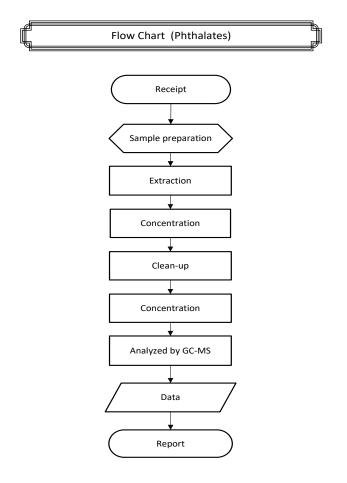
PAGE: 9 of 9

REPORT NO. RT21R-S2848-E

DATE: May 06, 2021

SAMPLE ID NO. : RT21R-S2848

SAMPLE DESCRIPTION: HT-Z1



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

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: http://www.intertek.com/terms/. Intertek's responsibility and liability are limited to the terms and conditions of the aareement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

This report shall not be reproduced, except in full.

This report is not related to the scope of Korea Laboratory Accreditation Scheme.

#### Intertek Testing Services Korea Ltd.



