



Test Report No. F690101/LF-CTSAYAA24-02564

Issued Date : 2024. 01. 19

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DHSTEEL

95, Chungjusandan 1-ro
Chungju-si, Chungcheongbuk-do
Korea



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

SGS File No. : AYAA24-02564
Product Name : S15C
Item No./Part No. : N/A
Received Date : 2024. 01. 12
Test Period : 2024. 01. 12 to 2024. 01. 19
Test Results : For further details, please refer to following page(s)


Tonny Park Billy Oh

Technical Manager / SGS Korea Co., Ltd

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Sample No. : AYAA24-02564.001
Sample Description : S15C
Item No./Part No. : N/A
Materials : N/A

Heavy Metals

| Test Items | Unit | Test Method | MDL | Results |
|------------------------------|--------------------|---|-----|---------|
| Cadmium (Cd) | mg/kg | With reference to IEC 62321-5 : 2013, by ICP-OES | 0.5 | N.D. |
| Lead (Pb) | mg/kg | With reference to IEC 62321-5 : 2013, by ICP-OES | 5 | N.D. |
| Mercury (Hg) | mg/kg | With reference to IEC 62321-4 : 2013+AMD1:2017CSV, by ICP-OES | 2 | N.D. |
| Hexavalent Chromium (Cr VI)* | µg/cm ² | With reference to IEC 62321-7-1 : 2015, by UV-Vis | 0.1 | N.D. |

Flame Retardants-PBBs/PBDEs

| Test Items | Unit | Test Method | MDL | Results |
|--------------------------|-------|--|-----|---------|
| Monobromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Dibromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tribromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tetrabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Pentabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Hexabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Heptabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Octabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Nonabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Decabromobiphenyl | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Monobromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Dibromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tribromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Tetrabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Pentabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Hexabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Heptabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Octabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Nonabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |
| Decabromodiphenyl ether | mg/kg | With reference to IEC 62321-6 : 2015, by GC-MS | 5 | N.D. |

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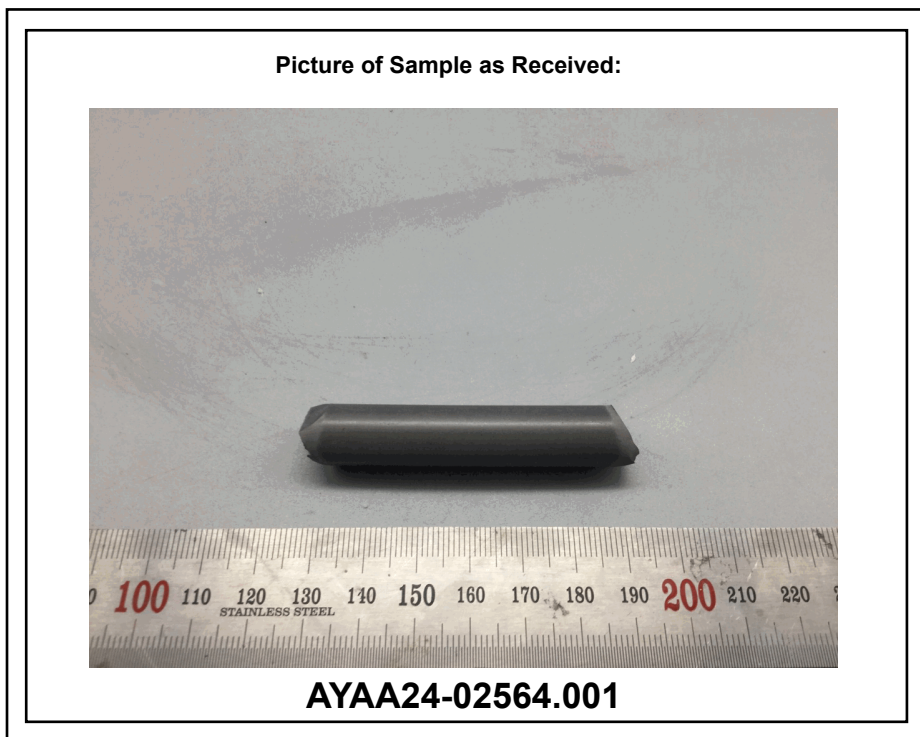
Sample No. : AYAA24-02564.001
Sample Description : S15C
Item No./Part No. : N/A
Materials : N/A

Flame Retardants

| Test Items | Unit | Test Method | MDL | Results |
|--------------------------------|-------|--|-----|---------|
| Hexabromocyclododecane (HBCDD) | mg/kg | With reference to USEPA 3540 C, by LC/MS | 5 | N.D. |

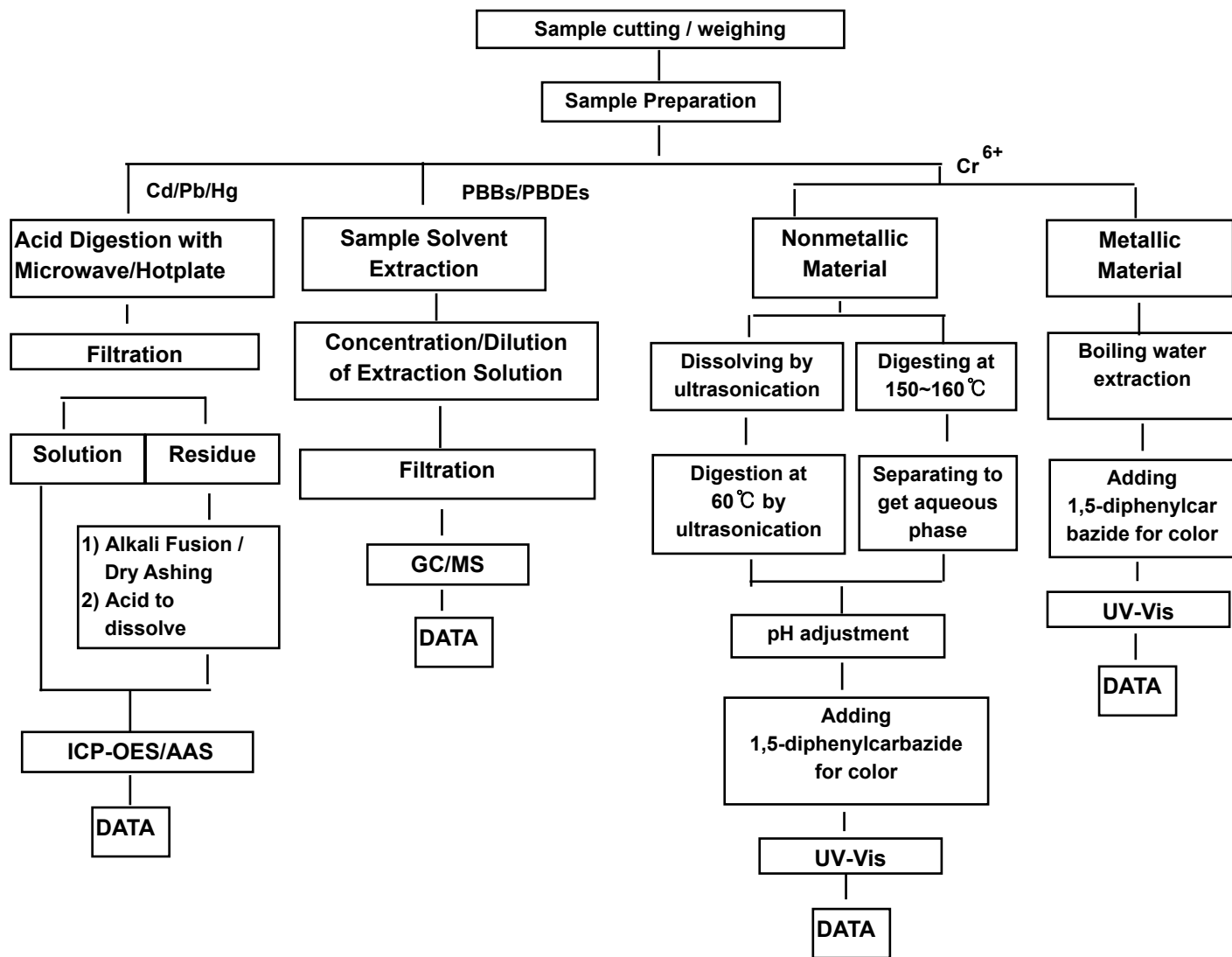
- NOTE: (1) N.D. = Not detected. (<MDL)
(2) mg/kg = ppm, ug/kg = ppb, mg/L = ppm
(3) MDL = Method Detection Limit
(4) - = No regulation
(5) ** = Qualitative analysis (No Unit)
(6) Negative = Undetectable / Positive = Detectable
(7) * = a. The sample is positive for Cr VI if the Cr VI concentration is greater than 0.13 ug/cm2.
The sample coating is considered to contain Cr VI.
b. The sample is negative for Cr VI if Cr VI is ND(concentration less than 0.10 ug/cm2).
The coating is considered a non-Cr VI based coating.
c. The result between 0.10 ug/cm2 and 0.13 ug/cm2 is considered to be inconclusive – unavoidable coating variations may influence the determination.
(8) The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test report is not related to Korea Laboratory Accreditation Scheme.

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Testing Flow Chart for RoHS:Cd/Pb/Hg/Cr⁶⁺ /PBBs&PBDEs Testing



The samples were dissolved totally at the acid digestion step of the above flow chart for Cd,Pb,Hg
 Section Chief : Tonny Park



Testing Flow Chart for HBCD



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

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