Test Report

No. 4666929-CH47 Date: October 7, 2020 Page 1 of 5

Samtec Inc.
520 Park East Blvd.
New Albany, IN 47150
United States

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

High Copper Alloy 390HT - Color = Bare Copper
Model/Part No.: High Copper Alloy 390HT
Country of Destination: USA

Sample Received Date: 8/31/2020

Test Requested: Please refer to the result summary.
Test Method & Results: Please refer to next page(s).

Result Summary:

<table>
<thead>
<tr>
<th>Test Requested</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RoHS Directive 2011/65/EU Annex II - Lead, Cadmium, Mercury and Hexavalent Chromium Content</td>
<td>PASS</td>
</tr>
</tbody>
</table>

Signed for and on behalf of SGS North America, Inc.

Prepared By:

Shaina Gibbons
Technical Report Writer, Chemistry Laboratory

Crystal Melecio
Report Writer, Chemistry Laboratory

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1. RoHS Directive 2011/65/EU Annex II - Lead, Cadmium, Mercury and Hexavalent Chromium Content

Testing was done at an SGS Affiliate Laboratory:

With reference to IEC62321-7-1:2015, analyzed by UV-Vis. (Decision Rule: please refer to appendix 1: Category 4)

<table>
<thead>
<tr>
<th>Test Item(s)</th>
<th>Limit</th>
<th>Unit</th>
<th>MDL</th>
<th>003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium (Cd)</td>
<td>100</td>
<td>mg/kg</td>
<td>2</td>
<td>ND</td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>1,000</td>
<td>mg/kg</td>
<td>5</td>
<td>ND</td>
</tr>
<tr>
<td>Mercury (Hg)</td>
<td>1,000</td>
<td>mg/kg</td>
<td>2</td>
<td>ND</td>
</tr>
<tr>
<td>Hexavalent Chromium (Cr(VI))</td>
<td>-</td>
<td>µg/cm²</td>
<td>0.10</td>
<td>ND</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specimen No.</th>
<th>SGS Sample ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HKT20-032727.003</td>
<td>Coppery metal</td>
</tr>
</tbody>
</table>

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

Notes:
(2) ▼ = a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/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 µg/cm²). The coating is considered a non-Cr(VI) based coating
  c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

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SGS North America Inc. | Consumer Testing Services 291 Fairfield Ave, Fairfield, NJ 07004, USA t (973) 575-5252 f (973) 575-7175 www.sgs.com
## Appendix 1

<table>
<thead>
<tr>
<th>Category</th>
<th>Decision Rule Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The decision rule for conformity reporting is based on the non-binary statement with guard band (a small expansion of the measurement uncertainty) defined in ILAC-G5 09/2019 Clause 4.2.3. A. &quot;Pass&quot; - the measured value is within (or below/above) the acceptance limit, where the acceptance limit is below/above the guard band. B. &quot;Conditional Pass&quot; - The measured values were observed in tolerance at the points tested. The specific false accept risk is up to 2.5%. C. &quot;Conditional Fail&quot; - One or more measured values were observed out of tolerance at the points tested. However, a portion of the expanded measurement uncertainty intervals about one or more measured values exceeded out of tolerance. When the measured result is close to the tolerance, the specific false accept risk is up to 50%. D. &quot;Fail&quot; - the measured value is out of (or below/above) the tolerance limit added/subtracted to the guard band.</td>
</tr>
</tbody>
</table>

| 2 | The decision rule for conformity reporting is based on BS EN 1011-1:2011+A1:2015: Reference test method for release of nickel from all post assemblies which are inserted into pierced parts of the human body and articles intended to come into direct and prolonged contact with the skin in Section 9.2 interpretation of results. |


| 4 | The decision rule for conformity reporting is according to the EC 62321-7-1 Edition 1.0 2015-06 Section 7, Table 1 (Comparison to standard and interpretation of result). |

| 5 | The decision rule for conformity reporting is according to the EC 62321-3-1 Edition 1.0 2013-06 Annex A.3 interpretation of result. |

| 6 | The decision rule for conformity reporting is according to the G5/T 26125-2011 Annex A to B. |

| 7 | The decision rule for conformity reporting is according to the requested specification or standard (ASTM F803-17 section 4.3.5). |

| 8 | The decision rule for conformity reporting is according to the requested specification or standard (AS/NZS ISO 8124 Part 3 section 4.2). |

**Remark:** If the decision rule is not feasible to be used and the uncertainty of the result is able to be provided, the uncertainty range of the result will be shown in the report. Otherwise, only result will be shown in the report.

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Flowchart for RoHS Heavy Metals

- Cutting/Preparation
- Weigh Sample
- Acid Digestion with appropriate acid
- Filtration
- Solution
- Residue
  - a. Dry Ashing
  - b. Dissolution by HNO₃/HCL
- ICP-MS

Note:
1. The Cd, Pb, Hg contents test on polymeric samples were dissolved totally by pre-conditioning method according to above flow chart.
2. Cr⁶⁺ is performed only when total Cr is detected.
Test Report

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Sample Photo(s):

Photo was taken at an SGS Affiliate Laboratory:

HKTEC2003272703

SGS authenticates the photo(s) on the original report only

*** End of Report ***