

**Samtec**  
520 Park East Blvd.  
New Albany, IN 47151  
United States

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

**Nickel Plating on Graphite Rod**  
**Model/Part No.: Nickel Plating**  
**Country of Destination: USA**

Sample Received Date:

**6/28/2018**

Testing Period:

**6/29/2018 – 7/9/2018**

Test Requested : Please refer to the result summary.

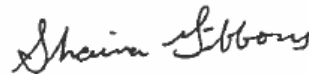
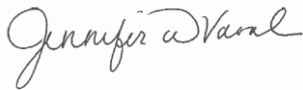
Test Method & Results : Please refer to next page(s).

Result Summary :

| Test Requested  | Comment |
|---|---------|
| 1. RoHS Directive 2011/65/EU Annex II – Cadmium, Lead, Mercury, Hexavalent Chromium Content | PASS    |

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

Prepared By:



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

| Test Item(s):              | Unit  | Test Method   | Results | MDL | Limit |
|----------------------------|-------|---|---------|-----|-------|
|                            |       |   | 1       |     |       |
| Cadmium(Cd)                | mg/kg | With reference to IEC 62321-5:2013  | ND      | 2   | 100   |
| Lead (Pb)                  | mg/kg | (Determination of Cd and Pb by ICP-OES and /or ICP-MS)                                | ND      | 2   | 1000  |
| Mercury (Hg)               | mg/kg | With reference to IEC 62321-4:2013<br>(Determination of Hg by ICP-OES and/ or ICP-MS) | ND      | 2   | 1000  |
| Hexavalent Chromium (CrVI) | mg/kg | With reference to IEC 62321; EPA 3060A<br>(Determination of CrVI by UV-VIS)           | ND*     | 2   | 1000  |
| <b>Conclusion</b>          | /     | /   | PASS    | /   | /     |

**Sample Description:**

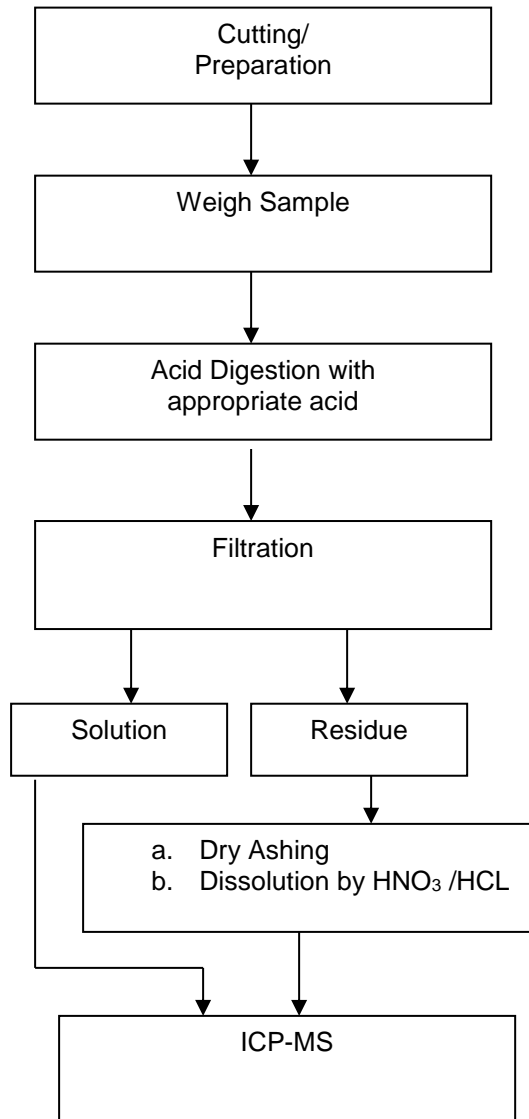
- Nickel Plating on Graphite Rod

**Note:**

- mg/kg = ppm ; 0.1wt% = 1000ppm
- ND= not detected
- MDL = Method Detection Limit
- = not regulated
- \* = Total Chromium analysis by ICP-MS and/or ICP-OES was not detected in submitted sample. Therefore, Hexavalent Chromium determination using UV-Visible Spectroscopy was not performed.
- IEC 62321 series is equivalent to EN 62321 series  
[http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:1258637,25](http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25)

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Flowchart for RoHS Heavy Metals



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**Sample Photo(s):**

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

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

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