

**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:

**Matte Tin Plating on Graphite Rod**  
**Model/Part No.: Matte Tin 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.

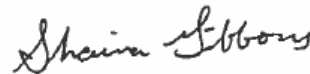
Test Method & Results : Please refer to next page(s).

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 (Determination of Cd and Pb by ICP-OES and /or ICP-MS)	ND	2	100
Lead (Pb)	mg/kg		44.6	2	1000
Mercury (Hg)	mg/kg	With reference to IEC 62321-4:2013 (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 (Determination of CrVI by UV-VIS)	ND*	2	1000
<b>Conclusion</b>	/	/	PASS	/	/

**Sample Description:**

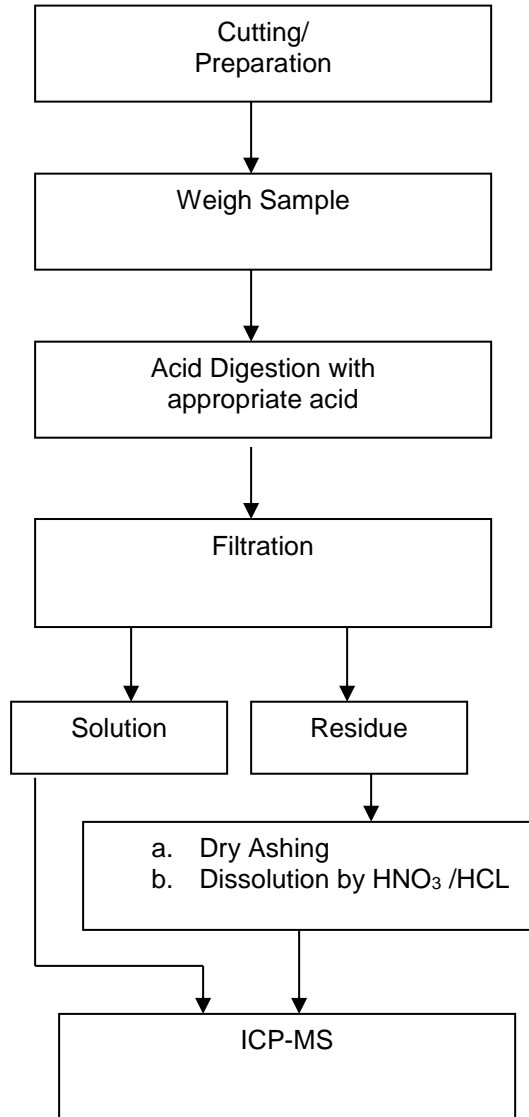
- Matte Tin Plating on Graphite Rod

**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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