



## Test Report

No. 951524-CH01

Date: January 19, 2018

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Tekna Plasma Systems  
2935 Industriel Blvd.  
Sherbrooke, Quebec J1L 2T9  
Canada

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

**Ti64 Powder**  
**Color: Grey**  
**Style No.: 175961**

Sample Received Date:

1/11/2018

Testing Period:

1/11/2018 – 1/17/2018

Test Requested : Please refer to the test results.

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

Result Summary :

Test Requested	Comment
1. RoHS Directive 2011/65/EU Annex II [amended by Directive (EU) 2015/863]	PASS

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

Prepared By:

Jennifer Vaval  
Laboratory Operations Supervisor, Chemistry  
Laboratory

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Report Writer, Chemistry Laboratory

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## 1. RoHS Directive 2011/65/EU Annex II [amended by Directive (EU) 2015/863]

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		ND	2	1000
Mercury (Hg)	mg/kg		ND	2	1000
Hexavalent Chromium (CrVI)	mg/kg	With reference to IEC 62321:2008 (Determination of CrVI by UV-VIS)	ND*	2	1000
<b>Sum of PBBs</b>	mg/kg	With reference to IEC 62321-6:2015 (Determination of PBB and PBDE by GC-MS)	ND	-	1000
Monobromobiphenyl	mg/kg		ND	5	-
Dibromobiphenyl	mg/kg		ND	5	-
Tribromobiphenyl	mg/kg		ND	5	-
Tetrabromobiphenyl	mg/kg		ND	5	-
Hexabromobiphenyl	mg/kg		ND	5	-
Pentabromobiphenyl	mg/kg		ND	5	-
Heptabromobiphenyl	mg/kg		ND	5	-
Octabromobiphenyl	mg/kg		ND	5	-
Nonabromobiphenyl	mg/kg		ND	5	-
Decabromobiphenyl	mg/kg		ND	5	-
<b>Sum of PBDEs</b>	mg/kg		ND	-	1000
Monobromodiphenyl ether	mg/kg		ND	5	-
Dibromodiphenyl ether	mg/kg		ND	5	-
Tribromodiphenyl ether	mg/kg		ND	5	-
Tetrabromodiphenyl ether	mg/kg		ND	5	-
Pentabromodiphenyl ether	mg/kg		ND	5	-
Hexabromodiphenyl ether	mg/kg		ND	5	-
Heptabromodiphenyl ether	mg/kg		ND	5	-
Octabromodiphenyl ether	mg/kg		ND	5	-
Nonabromodiphenyl ether	mg/kg		ND	5	-
Decabromodiphenyl ether	mg/kg		ND	5	-
<b>Conclusion</b>	/		PASS	/	/

### Sample Description:

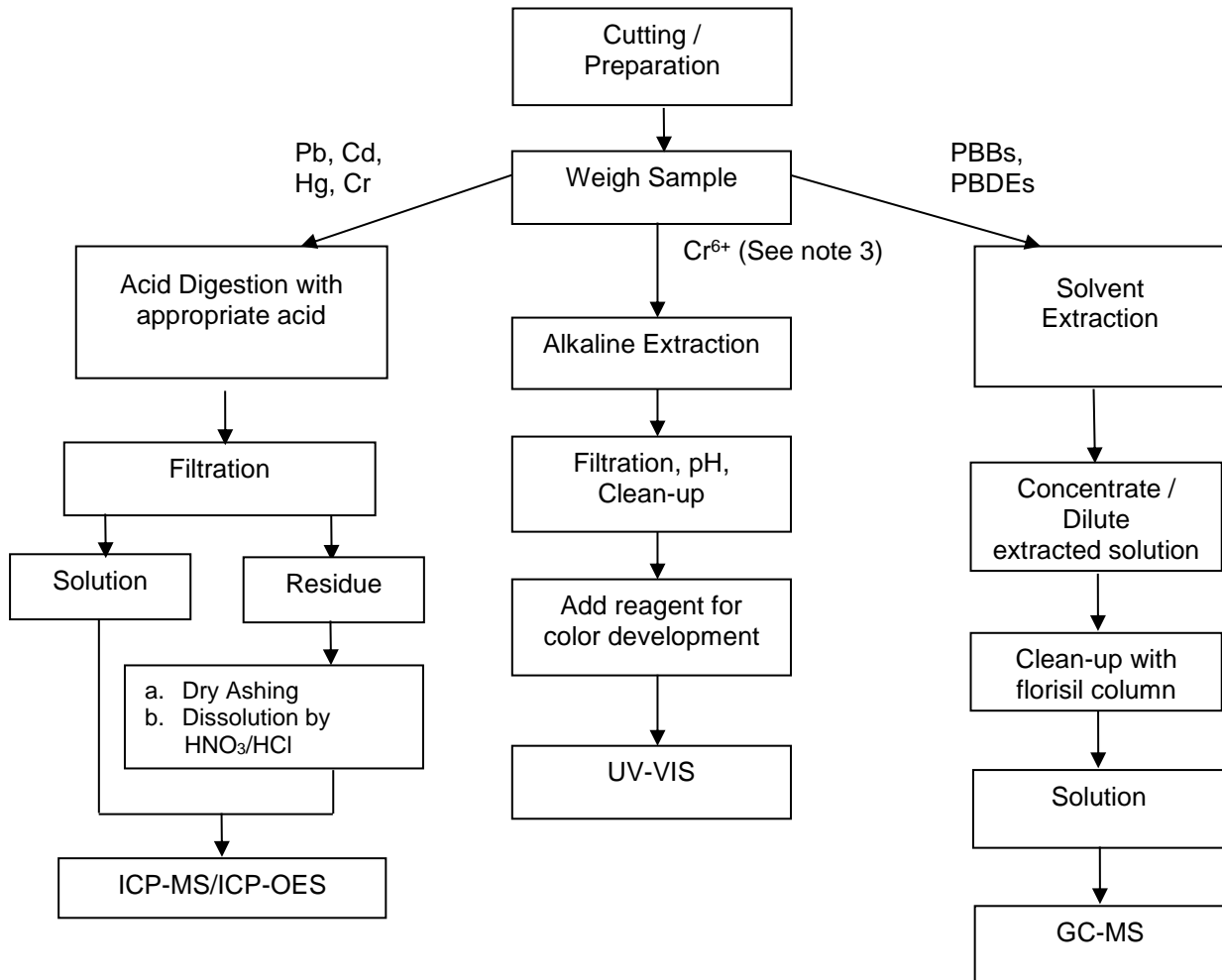
1. Ti64 Powder

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**Note :**

- (a) mg/kg = ppm ; 0.1wt% = 1000ppm
- (b) ND= not detected
- (c) MDL = Method Detection Limit
- (d) - = not regulated
- (e) \* = 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.
- (f) 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)

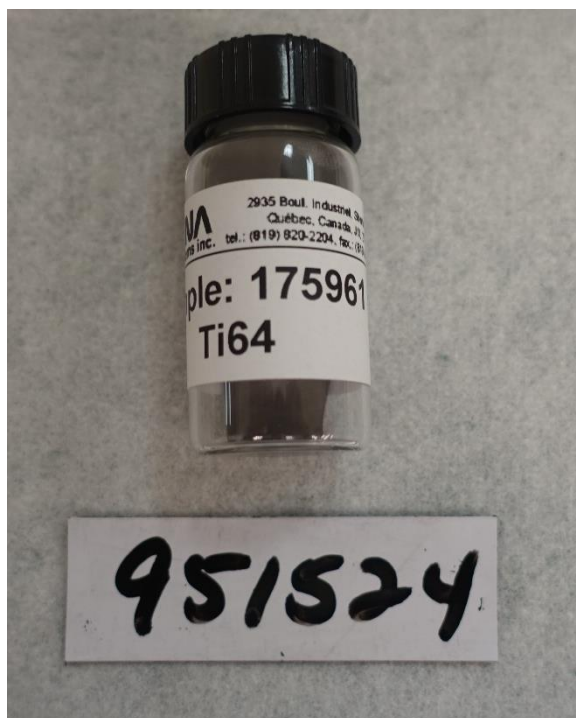
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**Flowchart for ROHS Testing:**


- Note :
1. For Cr(VI), spot test is adopted for metal sample.
  2. The Cd, Pb, Hg contents test on polymeric samples were dissolved totally by pre-conditioning method according to above flow chart.
  3. Cr<sup>6+</sup> is performed only when total Cr is detected

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### Sample Photo:



SGS authenticates the photo on the original report only

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

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