

Test Report No. SHAEC1117249001 Date: 20 Feb 2013 Page 1 of 7

DIATOOL CO., LIMITED

11/F,BLOCK 3,NO.775,ZHONGXINGROAD,JIANGDONG,NINGBO,ZHEJIANG,CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as: POT MAGNET

SGS Job No. : SP11-032568 - SH

Model No.: A25

Date of Sample Received: 01 Feb 2013

Testing Period: 04 Feb 2013 - 06 Feb 2013

Test Requested: Selected test(s) as requested by client.

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

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

Conclusion: Based on the performed tests on selected part of submitted sample(s), the

results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits

in RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of SGS-CSTC Ltd.

Wang Lini, Renee Approved Signatory

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#### Test Results:

## **Test Part Description:**

Specimen No.	SGS Sample ID	Description
1	SHA11-172490.001	Silvery metal
2	SHA11-172490.002	Silvery metal
3	SHA11-172490.003	White plastic ring

#### Remarks:

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

#### RoHS Directive 2011/65/EU

Test Method: With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
- (5) Determination of PBBs / PBDEs content by GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>003</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1,000	mg/kg	2	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND

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Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>003</u>	
Sum of PBDEs	1,000	mg/kg	-	ND	
Monobromodiphenyl ether	-	mg/kg	5	ND	
Dibromodiphenyl ether	-	mg/kg	5	ND	
Tribromodiphenyl ether	-	mg/kg	5	ND	
Tetrabromodiphenyl ether	-	mg/kg	5	ND	
Pentabromodiphenyl ether	-	mg/kg	5	ND	
Hexabromodiphenyl ether	-	mg/kg	5	ND	
Heptabromodiphenyl ether	-	mg/kg	5	ND	
Octabromodiphenyl ether	-	mg/kg	5	ND	
Nonabromodiphenyl ether	-	mg/kg	5	ND	
Decabromodiphenyl ether	-	mg/kg	5	ND	

#### Notes:

(1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II

### RoHS Directive 2011/65/EU

Test Method: With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Spot test / Colorimetric Method using UV-Vis.
- (5) Determination of PBBs / PBDEs by GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	<u>002</u>
Cadmium (Cd)	100	mg/kg	2	ND	ND
Lead (Pb)	1,000	mg/kg	2	ND	ND
Mercury (Hg)	1,000	mg/kg	2	ND	ND
Hexavalent Chromium (Cr(VI))	-	-	$\Diamond$	Negative	Negative
Sum of PBBs	1,000	mg/kg	-		ND
Monobromobiphenyl	-	mg/kg	5		ND
Dibromobiphenyl	-	mg/kg	5		ND
Tribromobiphenyl	-	mg/kg	5		ND
Tetrabromobiphenyl	-	mg/kg	5		ND
Pentabromobiphenyl	-	mg/kg	5		ND
Hexabromobiphenyl	-	mg/kg	5		ND
Heptabromobiphenyl	-	mg/kg	5		ND
Octabromobiphenyl	-	mg/kg	5		ND
Nonabromobiphenyl	-	mg/kg	5		ND

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Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	<u>002</u>	
Decabromobiphenyl	-	mg/kg	5		ND	
Sum of PBDEs	1,000	mg/kg	-		ND	
Monobromodiphenyl ether	-	mg/kg	5		ND	
Dibromodiphenyl ether	-	mg/kg	5		ND	
Tribromodiphenyl ether	-	mg/kg	5		ND	
Tetrabromodiphenyl ether	-	mg/kg	5		ND	
Pentabromodiphenyl ether	-	mg/kg	5		ND	
Hexabromodiphenyl ether	-	mg/kg	5		ND	
Heptabromodiphenyl ether	-	mg/kg	5		ND	
Octabromodiphenyl ether	-	mg/kg	5		ND	
Nonabromodiphenyl ether	-	mg/kg	5		ND	
Decabromodiphenyl ether	-	mg/kg	5		ND	

#### Notes:

- (1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II
- (2) \$ Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

The tested sample should be further verified by boiling-water-extraction method if the spot test result is Negative or cannot be confirmed.

Boiling-water-extraction:

Negative = Absence of CrVI coating; Positive = Presence of CrVI coating

The detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

For corrosion protection coatings on metals: Information on storage conditions and production date of the tested sample is unavailable and thus results of Cr(VI) represent status of the sample at the time of testing

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If the company is a stated the results shown in this test report refer only to the sample(s) tested.

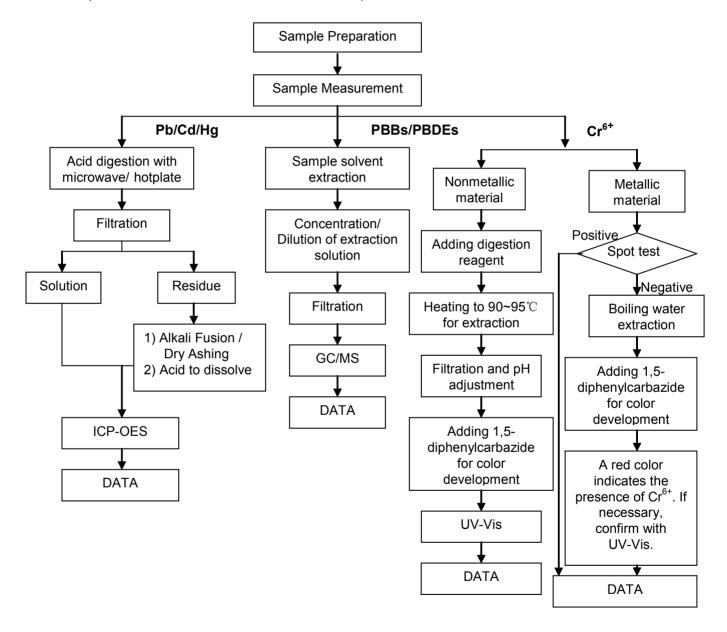


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#### **ATTACHMENTS**

# **RoHS Testing Flow Chart**

- 1) Name of the person who made testing: Jan Shi/Yoyo Wang/Allen Xiao/Gary Xu
- 2) Name of the person in charge of testing: Jeff Zhang/George Xu/ Elim Lin
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr6+ and PBBs/PBDEs test method excluded)



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# Sample photo:





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