

Test Report No. SHAHG1613034501 Date: 21

Date: 21 Jun 2016

Page 1 of 4

MAGNTEK ELECTRONICS (SHANGHAI) CO., LTD BULIDING 17, NO. 908, ZIPING ROAD, PUDONG, SHANGHAI

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

SGS Job No.:

SHHL1606032751SD - SH

Style No.:

SOT-23

Date of Sample Received:

16 Jun 2016

Testing Period:

16 Jun 2016 - 21 Jun 2016

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).

Result Summary:

Test Requested	Conclusion
RoHS Directive 2011/65/EU	See Results
Phthalates	See Results

Signed for and on behalf of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Serena Wang

Approved Signatory

Gerener Wanf



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Test Report

No. SHAHG1613034501

Date: 21 Jun 2016

Page 2 of 4

Test Results:

Test Part Description:

Specimen No. SGS Sample ID Description

SN1 SHA16-130345.001 Small plastic sensor with metal part

Remarks:

(1) 1 mg/kg = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected (< MDL)

(4) "-" = Not Regulated

RoHS Directive 2011/65/EU

Test Method:

- (1) With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
- (2) With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
- (3) With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
- (4) With reference to IEC 62321:2008, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
- (5) With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	2	ND
Sum of PBBs	1000	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
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND



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Test Report	No. SHAHG1613034501		Date: 21 Jun 2016		Page 3 of 4
Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	
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 the directive 2011/65/EU, Annex II

Phthalates

Test Method: Determination of phthalates by GC-MS based on EN 14372:2004.

Test Item(s) Dibutyl Phthalate (DBP)	<u>CAS NO.</u> 84-74-2	<u>Unit</u> %	MDL 0.003	<u>001</u> ND
Benzylbutyl Phthalate (BBP)	85-68-7	%	0.003	ND
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	%	0.003	ND
Diisobutyl Phthalate (DIBP)	84-69-5	%	0.003	ND

Notes:

Reference Information: Directive 2011/65/EU recasting RoHS directive 2002/95/EC and the latest amending directive:

- (1) Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), and Dibutyl phthalate (DBP) are considered as a priority for risk evaluation and substance restriction.
- (2) Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl Phthalates (DIBP) have been adopted in the draft of Commission Delegated Directive amending Annex II to Directive 2011/65/EU of the European Parliament, and the regulatory limit of each restricted substances should be 0.1%.



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Test Report

No. SHAHG1613034501

Date: 21 Jun 2016

Page 4 of 4

Sample photo:



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