SGS

Test Report

No. 2035319/EC Date : Sep 26 2005

MULTICOMP PRODUCTS MANUFACTURED BY
NINGBO HKE ELECTRONICS CO., LTD.
28, JIACUN INDUSTRIAL AREA,
NINGBO ZHEJIANG 315135, CHINA

Report on the submitted sample said to be WASHABLE PCB RELAY.

SGS Job No.	:	1856109
Part Description	:	HRS2 SERIES, DPCO TYPE
Buyer	:	PREMIER FARNELL ASIA PTE LTD
Supplier	:	NINGBO HKE ELECTRONICS CO., LTD.
Sample Receiving Date	:	SEP 02 2005
Testing Period	:	SEP 03 - 10 2005

Test Requested : With reference to RoHS Directive 2002/95/EC

1) To determine the Cadmium Content in the submitted sample.
2) To determine the Lead Content in the submitted sample.
3) To determine the Mercury Content in the submitted sample.
4) To determine the Cadmium, Lead and Mercury content in the submitted metal sample.
5) To determine the Hexavalent Chromium Content on the submitted sample.
6) Determination of PBBs (polybrominated biphenyls), PBDEs (Polybrominated diphenylethers) of the submitted sample.

Test Method :

1) With reference to BS EN 1122:2001, Method B, analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES).
2) With reference to EPA Method 3050B/ 3051/ 3052.
Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES).
3) With reference to EPA Method 3051/ 3052.
Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES).
4) With reference to in-house method. The sample was digested by acid.
Analysis was performed by Atomic Absorption or Inductively Coupled Argon Plasma – Atomic Emission Spectrometry (ICP-AES).
5) With reference to EPA Method 3060A & 7196A.
The samples were alkaline digested by using EPA Method 3060A, and then analyzed by using Colorimetric method 7196A.
6) With reference to SGS in-house method. Analysis was performed by GC/MS or LC/ MS.

Test Results : 1-6) Please refer to next page.

Conclusion : When tested as specified, the submitted sample complies with the requirements of RoHS Directive Consultation document on 2002/95/EC.

Signed for and on behalf of
SGS Hong Kong Ltd

Ho Ka Ting, Family
Laboratory Executive

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Test Results :

1-5)

Test Item	1	2	3	Detection Limit	Limit of RoHS Consultant Document
Cadmium (Cd)	ND	ND	ND	2 ppm	100 ppm
Lead (Pb)	16 ppm	15 ppm	10 ppm	2 ppm	1000 ppm
Mercury (Hg)	ND	ND	ND	2 ppm	1000 ppm
Hexavalent Chromium (Cr^{6+})	ND	ND	ND	2 ppm	1000 ppm

Test Item	4	5	6	Detection Limit	Limit of RoHS Consultant Document
Cadmium (Cd)	ND	ND	ND	2 ppm	100 ppm
Lead (Pb)	9 ppm	68 ppm	ND	2 ppm	1000 ppm
Mercury (Hg)	ND	ND	ND	2 ppm	1000 ppm
Hexavalent Chromium (Cr^{6+})	ND	ND	ND	2 ppm	1000 ppm

Test Item	7	8	Detection Limit	Limit of RoHS Consultant Document
Cadmium (Cd)	ND	ND	2 ppm	100 ppm
Lead (Pb)	ND	ND	2 ppm	1000 ppm
Mercury (Hg)	ND	ND	2 ppm	1000 ppm
Hexavalent Chromium (Cr^{6+})	ND	ND	2 ppm	1000 ppm

(Results shown are of the total weight of samples)

Note : ppm = mg/kg
ND = Not Detected
Not detected is reported when the reading is less than detection limit value

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Test Results (Cond't) :

6)

Flame Retardants	1	2	3	Detection Limit	Limit of RoHS Consultant Document
Polybrominated Biphenyls (PBBs)	ND	ND	ND	50 ppm	1000 ppm
Monobromobiphenyl	ND	ND	ND	5 ppm	--
Dibromobiphenyl	ND	ND	ND	5 ppm	--
Tribromobiphenyl	ND	ND	ND	5 ppm	--
Tetrabromobiphenyl	ND	ND	ND	5 ppm	--
Pentabromobiphenyl	ND	ND	ND	5 ppm	--
Hexabromobiphenyl	ND	ND	ND	5 ppm	--
Heptabromobiphenyl	ND	ND	ND	5 ppm	--
Octabromobiphenyl	ND	ND	ND	5 ppm	--
Nonabromobiphenyl	ND	ND	ND	5 ppm	--
Decabromobiphenyl	ND	ND	ND	5 ppm	--
Polybrominated Diphenylethers (PBDEs)	ND	ND	ND	50 ppm	1000 ppm
Monobromodiphenyl ether	ND	ND	ND	5 ppm	--
Dibromodiphenyl ether	ND	ND	ND	5 ppm	--
Tribromodiphenyl ether	ND	ND	ND	5 ppm	--
Tetrabromodiphenyl ether	ND	ND	ND	5 ppm	--
Pentabromodiphenyl ether	ND	ND	ND	5 ppm	--
Hexabromodiphenyl ether	ND	ND	ND	5 ppm	--
Heptabromodiphenyl ether	ND	ND	ND	5 ppm	--
Octabromodiphenyl ether	ND	ND	ND	5 ppm	--
Nonabromodiphenyl ether	ND	ND	ND	5 ppm	--
Decabromodiphenyl ether	ND	ND	ND	5 ppm	--

Flame Retardants	4	5	6	Detection Limit	Limit of RoHS Consultant Document
Polybrominated Biphenyls (PBBs)	ND	ND	ND	50 ppm	1000 ppm
Monobromobiphenyl	ND	ND	ND	5 ppm	--
Dibromobiphenyl	ND	ND	ND	5 ppm	--
Tribromobiphenyl	ND	ND	ND	5 ppm	--
Tetrabromobiphenyl	ND	ND	ND	5 ppm	--
Pentabromobiphenyl	ND	ND	ND	5 ppm	--
Hexabromobiphenyl	ND	ND	ND	5 ppm	--
Heptabromobiphenyl	ND	ND	ND	5 ppm	--
Octabromobiphenyl	ND	ND	ND	5 ppm	--
Nonabromobiphenyl	ND	ND	ND	5 ppm	--
Decabromobiphenyl	ND	ND	ND	5 ppm	--
Polybrominated Diphenylethers (PBDEs)	ND	ND	ND	50 ppm	1000 ppm
Monobromodiphenyl ether	ND	ND	ND	5 ppm	--
Dibromodiphenyl ether	ND	ND	ND	5 ppm	--
Tribromodiphenyl ether	ND	ND	ND	5 ppm	--
Tetrabromodiphenyl ether	ND	ND	ND	5 ppm	--
Pentabromodiphenyl ether	ND	ND	ND	5 ppm	--
Hexabromodiphenyl ether	ND	ND	ND	5 ppm	--
Heptabromodiphenyl ether	ND	ND	ND	5 ppm	--
Octabromodiphenyl ether	ND	ND	ND	5 ppm	--
Nonabromodiphenyl ether	ND	ND	ND	5 ppm	--
Decabromodiphenyl ether	ND	ND	ND	5 ppm	--

Note : ppm = mg/kg
ND = Not Detected
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Test Results (Cond't) :

Flame Retardants	7	8	Detection Limit	Limit of RoHS Consultant Document
Polybrominated Biphenyls (PBBs)	ND	ND	50 ppm	1000 ppm
Monobromobiphenyl	ND	ND	5 ppm	--
Dibromobiphenyl	ND	ND	5 ppm	--
Tribromobiphenyl	ND	ND	5 ppm	--
Tetrabromobiphenyl	ND	ND	5 ppm	--
Pentabromobiphenyl	ND	ND	5 ppm	--
Hexabromobiphenyl	ND	ND	5 ppm	--
Heptabromobiphenyl	ND	ND	5 ppm	--
Octabromobiphenyl	ND	ND	5 ppm	--
Nonabromobiphenyl	ND	ND	5 ppm	--
Decabromobiphenyl	ND	ND	5 ppm	--
Polybrominated Diphenylethers (PBDEs)	ND	ND	50 ppm	1000 ppm
Monobromodiphenyl ether	ND	ND	5 ppm	--
Dibromodiphenyl ether	ND	ND	5 ppm	--
Tribromodiphenyl ether	ND	ND	5 ppm	--
Tetrabromodiphenyl ether	ND	ND	5 ppm	--
Pentabromodiphenyl ether	ND	ND	5 ppm	--
Hexabromodiphenyl ether	ND	ND	5 ppm	--
Heptabromodiphenyl ether	ND	ND	5 ppm	--
Octabromodiphenyl ether	ND	ND	5 ppm	--
Nonabromodiphenyl ether	ND	ND	5 ppm	--
Decabromodiphenyl ether	ND	ND	5 ppm	--

Note : ppm = mg/kg
ND = Not Detected
Not detected is reported when the reading is less than detection limit value.

Sample Description :

1. Black Plastic w/ White Printing (Body)
2. Black Plastic w/ Transparent Glue (Base)
3. White Plastic w/ Yellow Adhesive Tape (Core Case and Adhesive Tape)
4. White Plastic (Pin Holder)
5. Bronze Metal w/ Silvery Metal w/ Solder (Plate and Pin)
6. Silvery Metal (Axle)
7. Bronze Metal (Wire)
8. Silvery Metal (Core Case)

Remark : Photo appendix is included

*** End of Report ***

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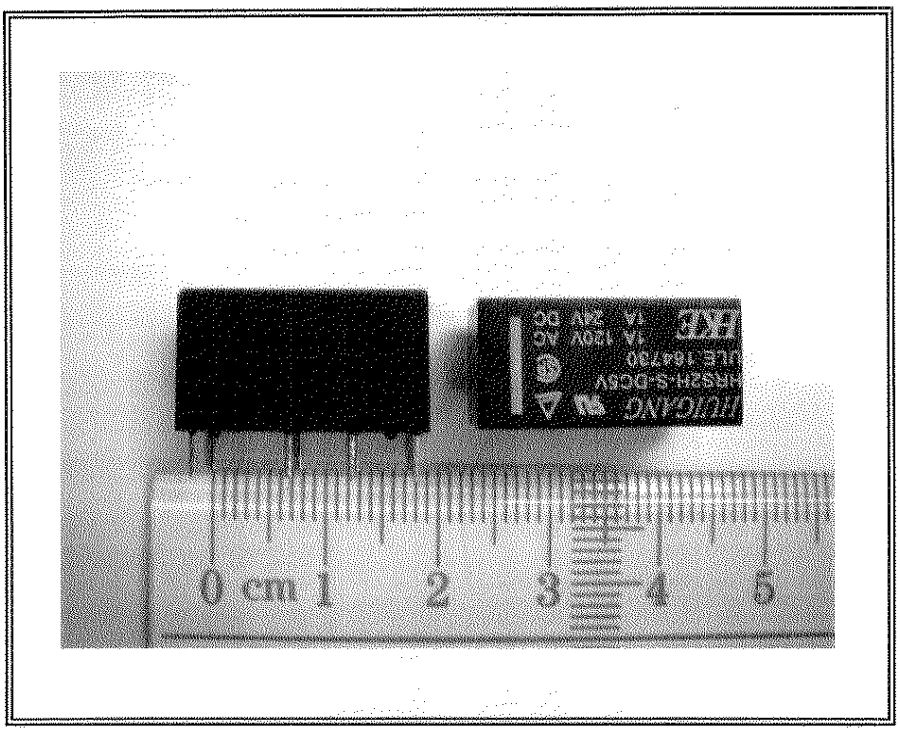
PHOTO APPENDIX



SGS authenticate the photo on original report only

Authorized Signature
Ho Ka Ting, Family
Laboratory Executive

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