

Test Report

No. SH6005420/CHEM

Date: Jan. 19, 2006

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SHANGHAI NANYA COPPER CLAD LAMINATE CO., LTD No.158 CHANGXIANG ROAD NANXIANG SHANGHAI CHINA

Report on the submitted sample said to be CCL.

SGS Ref No.

: SHEC0060100137

Model

: Lead-free soldering FR-4

Main Substance

: E-glass fabric, Bisphenol-A type epoxy, Novolac type epoxy

Sample Receiving Date: Jan. 16, 2006

Testing Period

: Jan. 16 - 19, 2006

Test Requested

- : 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 Hexavalent Chromium Content on the submitted sample.
- 5) To determine the PBBs(Polybrominated biphenyls) PBBEs(PBDEs) (Polybrominated biphenyl ethers) Content of the submitted sample.

Test Method

- : 1) With reference to BS EN 1122:2001, Method B, or other acid digestion. Analysis was performed by inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.
- 2) With reference to EPA Method 3050B/ 3051/ 3052, or other acid digestion Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.
- 3) With reference to US EPA 3052 or other acid digestion, Analysis was performed by Inductively Coupled Argon Plasma - Atomic Emission Spectrometry (ICP-AES) or US EPA7473 Analysis was performed by Hg Analyzer.
- 4) 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.
- 5) With reference to USEPA 8081A/8270D/3540C/3550C, Analysis was performed by GC-MS.

Test Results

: Please refer to next page

Signed for and on behalf of SGS-CSTC Chemical Laboratory

Ella Zhang

Sr. Section Head

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Test Results

2 Lead (Pb) mg/kg 2 N.D 3 Mercury (Hg) mg/kg 2 N.D 4 Hexavalent Chromium (Cr VI) mg/kg 2 N.D Polybrominated biphenyls (PBBs)	No.	<u>item</u>	Unit	DL	Δ
3 Mercury (Hg) mg/kg 2 N.D 4 Hexavalent Chromium (Cr VI) mg/kg 2 N.D Polybrominated biphenyls (PBBs)	1	Cadmium (Cd)	mg/kg	2	N.D.
4 Hexavalent Chromium (Cr VI) mg/kg 2 N.D. Polybrominated biphenyls (PBBs)	2	Lead (Pb)	mg/kg	2	N.D.
4 Hexavalent Chromium (Cr VI) mg/kg 2 N.D. Polybrominated biphenyls (PBBs) Monobromobiphenyl mg/kg 5 N.D. Dibromobiphenyl mg/kg 5 N.D. Tetrabromobiphenyl mg/kg 5 N.D. Pentabromobiphenyl mg/kg 6 N.D. Hexabromobiphenyl mg/kg 6 N.D. Heptabromobiphenyl mg/kg 6 N.D. Nonabromobiphenyl mg/kg 5 N.D. Nonabromobiphenyl mg/kg 5 N.D. Polybrominated biphenyl ethers (PBBEs(PBDEs)) Monobromobiphenyl ether mg/kg 5 N.D. Monobromobiphenyl ether mg/kg 5 N.D. Tribromobiphenyl ether mg/kg 5 N.D. Tetrabromobiphenyl ether mg/kg 5 N.D. Hexabromobiphenyl ether mg/kg 5 N.D. Hexabromobiphenyl ether mg/kg	3	Mercury (Hg)	mg/kg	2	N.D.
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		Octabromobiphenyl ether	mg/kg	5	N.D.
Decabromobiphenyl ether mg/kg 5 N.D		Nonabromobiphenyl ether	mg/kg	5	N.D.
		Decabromobiphenyl ether	mg/kg	5	N.D.

Sample Appearance Description(Photo see appendix): A. Copper clad laminated board (middle insulated board)

Note: 1mg/kg=1ppm=0.0001% DL= Detection Limit

N.D. = Not detected

Not Detected is reported when the reading is less than detection limit value.

*** End of Report ***

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