

TEST REPORT: S08CHM01494-01-CES

Date: 31 MAR 2008

Tel: +65 68851291 Fax: +65 67784301

Client's Ref: Q08CHM01143A

Email: huayi.chen@psbcorp.com

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SUBJECT

Testing for RoHS

CLIENT

Oriental Copper Co., Ltd
27th FL, Bangkok Insurance / Y.W.C.A. Building
25 Sathon Rd.
Thungmahamek,
Sathon Bangkok Thailand
Attn: Mr. Wirote Kamondetdecha

SAMPLE SUBMISSION DATE

17 Mar 2008

DESCRIPTION OF SAMPLE

One sample of OC-ETP Copper Busbar was received.

METHOD OF TEST

a) Cadmium, Lead, Mercury and Hexavalent Chromium

1. EPA Method 3050B for Cadmium content. Analysis was performed by ICP-OES
2. EPA Method 3050B for Lead content. Analysis was performed by ICP-OES
3. EPA Method 3052 for Mercury content. Analysis was performed by ICP-OES
4. With reference to IEC/TC 111 (Draft), IEC 62321, Ed.1 : Procedure for the determination of Levels of Regulated Substances in Electrotechnical Products. Determination of Hexavalent Chromium by Colorless and Colored Chromate Coating on Metals / Colorimetric Method

b) PBBs and PBDEs

- 1) The sample was extracted with organic solvent and cleaned up with appropriate procedures, followed by analysis using Gas Chromatograph – Mass Spectrometry (GC-MS).
- 2) The result was calculated based on the whole piece of sample.



Laboratory:
TUV SUD PSB Pte. Ltd.
Testing Services
No.1 Science Park Drive
Singapore 118221

Phone : +65-6885 1333
Fax : +65-6776 8670
E-mail: testing@tuv-sud-psb.sg
www.tuv-sud-psb.sg
Co. Reg : 199002667R

Regional Head Office:
TUV SUD Asia Pacific Pte. Ltd.
3 Science Park Drive, #04-01/05
The Franklin, Singapore 118223
TUV[®]



RESULTS

Table 1: The Analytical results of Cadmium, Lead, Mercury and Hexavalent Chromium

Test	OC-ETP Copper Busbar	RoHS Limit
Cadmium, Cd (ppm)	Not Detected	100
Lead, Pb (ppm)	Not Detected	1000
Mercury, Hg (ppm)	Not Detected	1000
Hexavalent Chromium, Cr ⁶⁺ (ppm)	Not Detected	1000

REMARKS

Method Detection Limit: Cd (5ppm), Pb (10ppm), Cr⁶⁺ (5ppm) and Hg (5ppm).

Table 2: The Analytical results of Polybrominated Biphenyls & Polybrominated Diphenyl Ethers

Test	OC-ETP Copper Busbar	RoHS Limit
Polybrominated Biphenyls (PBBs), ppm	Not detected	1 000
Polybrominated Diphenyl Ethers (PBDEs), ppm	Not detected	1 000

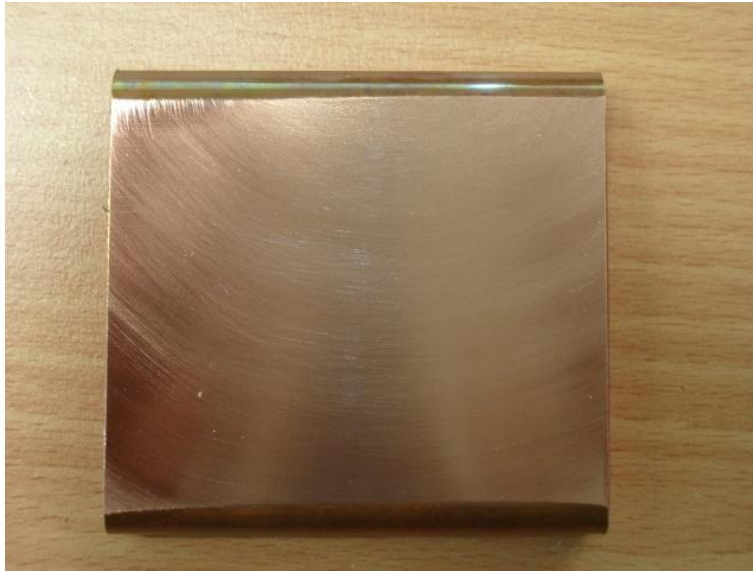
REMARKS

Method Detection limit: PBBs/PBDEs (250 ppm).

MR CHUA ENG SOON
SENIOR TECHNICAL EXECUTIVE

DR CHEN HUAYI
ASSISTANT VICE PRESIDENT
ELEMENTAL AND ENVIRONMENTAL ANALYSIS
CHEMICAL & MATERIALS

SAMPLE PICTURE



OC-ETP Copper Busbar

Test Report No.S08CHM01494-01-CES
31 MAR 2008



PSB Singapore

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January 2008