# **TEST REPORT**

Your Ref: PO: KHS-P-0601024 Date: 10 Feb 2006

Our Ref: **57S060299-PPG** Page: 1 of 4

DID: 68851278 / 68851291 Fax: 67784301

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### **SUBJECT**

Testing for RoHS.

#### **CLIENT**

Zhejiang HKE Relay Co., Ltd/NingBo HKE Electronics Co., Ltd 28 Jiacun Industrial Area 315135 NingBo City Zhejiang China

Attn: Mr Travis Tan

# SAMPLE SUBMISSION DATE

30 Dec 2005

### SAMPLE DESCRIPTION

One relay sample was received and said to be applicable to the following relay series:

HRA, HRB1, HRS1, HRS1K, HRS1KH3, HRS2, AC3, HRS3, HRS3T, HRS4, HRS4E, HRS4T, HRM, HRM1, HRM2, HRM3, HRM4, HMT2, HRMF, HCP1, HCP2, HCP3, HCP4, V6, V6F, CMP6, CMP7, CMP8, CMP9, L7, LH, LT, CMA1, CMA2, CMA31, CMA32, CMA33, CMA34, CMA36, CMA4, CMA51, CMA52, CMA512, CMA522, CMA512, CMA522, CMA522

The relay was dismantled into 4 parts based on "homogeneous materials". Refer to result table's P/N and description.

## **TEST METHOD**

- a) Cadmium, Lead, Mercury and Hexavalent Chromium
- Sample preparation by EN1122:2001, EN13346:2000, EPA3050B and ISO3613:2000.
- 2) Determination of Cadmium, Lead and Mercury by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES, ISO 11885:1996).
- 3) Determination of Hexavalent Chromium by ISO 3613: 2000.
- 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.



# **RESULTS**

No.	P/N and Description	Cd (ppm)	Pb (ppm)	Hg (ppm)	Cr <sup>6+</sup> (ppm)	PBBs/PBDEs (ppm)
1	Relay	-	-	-	-	-
а	Plastic Part	Not Detected	17	Not Detected	Not Detected	Not Detected
b	Copper Connectors	Not Detected	Not Detected	Not Detected	Not Detected	-
С	Copper Wires	Not Detected	Not Detected	Not Detected	Not Detected	-
d	Metal part	Not Detected	Not Detected	Not Detected	Not Detected	-

Detection Limit: Cadmium, Cd (5ppm), Lead, Pb (10ppm), Mercury, Hg (5ppm), Hexavalent Chromium, Cr<sup>6+</sup> (5ppm), Polybrominated Biphenyls, PBBs (250ppm) and Polybrominated Diphenyl Ethers, PBDEs (250ppm).

RoHS Limits: Cd (100ppm), Pb (1000ppm), Hg (1000ppm), Cr<sup>6+</sup> (1000ppm), PBBs (1000ppm), and PBDEs (1000ppm)

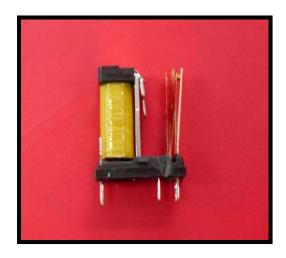
' - ' denotes Not Applicable.

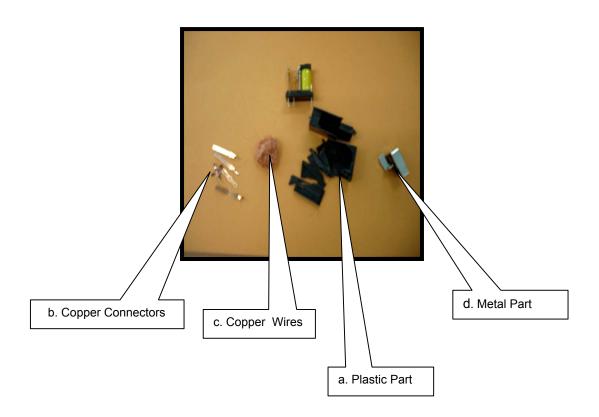
PER POH GEOK (MS)
TECHNICAL EXECUTIVE

**CHEN HUAYI, PhD** 

ASSISTANT VICE PRESIDENT
ELEMENTAL/ENVIRONMENTAL ANALYSIS

**TESTING GROUP** 







#### 57S0060299

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May 2005