



APPLICATION FOR RoHS DIRECTIVE

On Behalf of

Cho-Liang Thermal Tech Co., Ltd

2.4GHz Wireless Optical Mouse

Model No.: CNE-CMSW1X/CAMW-01X

Prepared for : Cho-Liang Thermal Tech Co., Ltd

Address: 5F-3, NO.14, Lane 609, Sec.5, Chung Hsin Rd., San Chung City, Taipei County, Taiwan.R.O.C.

Prepared By : Shenzhen Alpha Product Testing Co., Ltd.

Address: Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

Date of Test: May 04 - 06, 2015

Date of Report: May 07, 2015

Report Number: T1850408 06

Version Number: REV0

TEST REPORT
IEC 62321-3-1:2013

Restriction of Hazardous Substance



Report Reference No: T1850408 06

Tested by (name + signature): Rev Yuan

Approved by (name + signature): Susan Chen

Date of issue: May 07, 2015

Testing Laboratory: Shenzhen Alpha Product Testing Co., Ltd.

Address: Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

Testing location / procedure: TL [] SMT [] TMP []

Testing location / address: (Same as above.)

Applicant's name: Cho-Liang Thermal Tech Co., Ltd

Address: 5F-3, NO.14, Lane 609, Sec.5, Chung Hsin Rd., San Chung City, Taipei County, Taiwan.R.O.C.

Test specification:

Standard: IEC 62321-3-1:2013

Test procedure: RoHS procedure

Non-standard test method: N/A

Test item description: 2.4GHz Wireless Optical Mouse

Model/Type reference: CNE-CMSW1X/CAMW-01X

Manufacturer: Guangzhou Boda Electronic Equipment Co., Ltd

Address: 4 Xiajiyuanyi Road, Xindun Avenue, XinDun Village. Xintang District, GZ, PRC

Possible test case verdicts:

P=Pass, F=Fail, IC=Inconclusive, -- = Not Regulated

Testing

Date of receipt of test item: May 04, 2015

Date (s) of performance of tests: May 04 - 06, 2015

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

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Test Result of XRF

As per IEC 62321-3-1:2013, screened by XRF spectroscopy.

| No. | Component Description | Test Item | XRF Result |
|-----|--|----------------|------------|
| 1 | Black plastic shell | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 2 | Black plastic of DPI toggle key | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 3 | Black plastic cement of contact roller | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 4 | Black plastic cement pad | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 5 | Screw | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 6 | Black plastic shell of battery base | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 7 | Spring | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 8 | Silver color metal sheet | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |

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| No. | Component Description | Test Item | XRF Result |
|-----|-----------------------------|----------------|------------|
| 9 | Silver color metal of USB | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 10 | Black plastic of SB | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 11 | Pin of USB | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 12 | White wire covering | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 13 | White plastic terminal base | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 14 | Pin of terminal base | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 15 | Resistor | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 16 | Capacitor | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |

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| No. | Component Description | Test Item | XRF Result |
|-----|--------------------------|----------------|------------|
| 17 | Capacitor | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 18 | Capacitor | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 19 | Capacitor | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 20 | LED | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 21 | Crystal | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 22 | IC | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 23 | IC | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 24 | Red plastic of key-press | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |

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| No. | Component Description | Test Item | XRF Result |
|-----|---------------------------------------|----------------|------------|
| 25 | Key-press | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 26 | Black plastic of left-click | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 27 | Black plastic of right-click | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 28 | White plastic of left-click | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 29 | White plastic of right-click | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 30 | Black plastic shaft of contact roller | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 31 | Silver color metal | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |
| 32 | Copper metal sheet | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | -- |

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| No. | Component Description | Test Item | XRF Result |
|-----|--------------------------------------|----------------|------------|
| 33 | Black plastic | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 34 | Black plastic of middle mouse button | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 35 | White plastic of middle mouse button | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 36 | Transparent plastic | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |
| 37 | Switch | Cadmium (Cd) | P |
| | | Lead (Pb) | P |
| | | Mercury (Hg) | P |
| | | Chromium (Cr) | P |
| | | Bromine (Br) | P |

Remark:

- (1) There are the results on total Br while test items on restricted substances are PBBs and PBDEs. There is the result on total Cr while test item on restricted substances is Cr(VI).
- (2) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC62321 (unit: mg/kg).

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| Element | Polymer Material | Metallic Material | Composite Material |
|----------------|---|---|---|
| Cadmium (Cd) | $P \leq 70 - 3\sigma < IC < 130 + 3\sigma \leq F$ | $P \leq 70 - 3\sigma < IC < 130 + 3\sigma \leq F$ | $P \leq 50 - 3\sigma < IC < 150 + 3\sigma \leq F$ |
| Lead (Pb) | $P \leq 700 - 3\sigma < IC < 1300 + 3\sigma \leq F$ | $P \leq 700 - 3\sigma < IC < 1300 + 3\sigma \leq F$ | $P \leq 500 - 3\sigma < IC < 1500 + 3\sigma \leq F$ |
| Mercury (Hg) | $P \leq 700 - 3\sigma < IC < 1300 + 3\sigma \leq F$ | $P \leq 700 - 3\sigma < IC < 1300 + 3\sigma \leq F$ | $P \leq 500 - 3\sigma < IC < 1500 + 3\sigma \leq F$ |
| Chromium (Cr) | $P \leq 700 - 3\sigma < IC$ | $P \leq 700 - 3\sigma < IC$ | $P \leq 500 - 3\sigma < IC$ |
| Bromine (Br) | $P \leq 300 - 3\sigma < IC$ | -- | $P \leq 250 - 3\sigma < IC$ |

(3) mg/kg = milligram per kilogram

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Tested sample photos



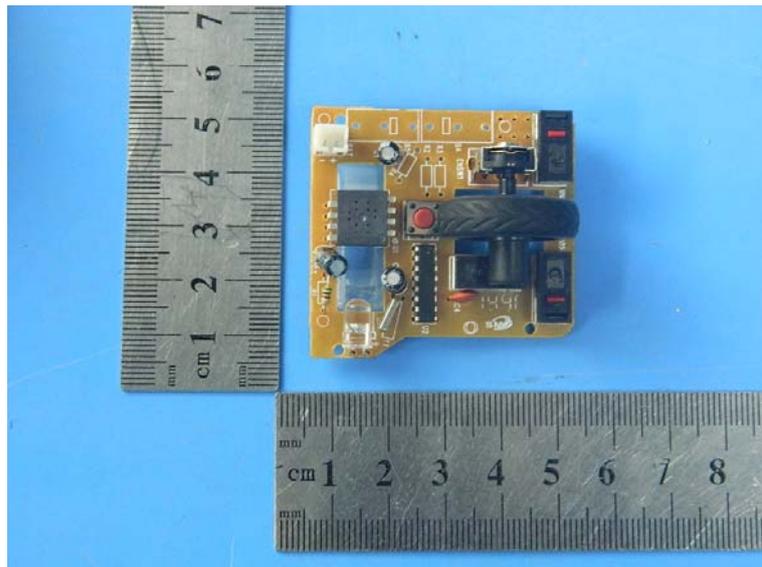
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Tested sample photos



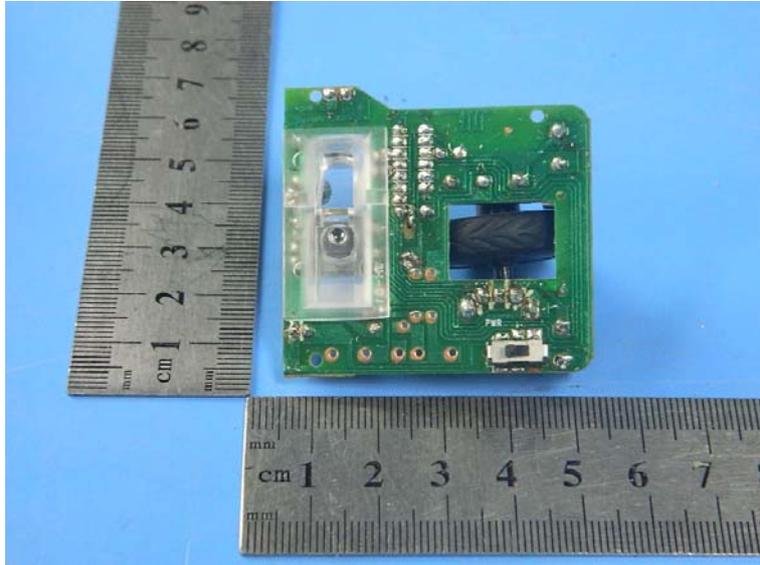
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