

030-38293

NRC FORM 313  
(3-2009)  
10 CFR 30, 32, 33,  
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 3/31/2012

### APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to [infocollects.resource@nrc.gov](mailto:infocollects.resource@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

**INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.**

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS  
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

*ICODE  
23986*

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM  
DIVISION OF NUCLEAR MATERIALS SAFETY  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
612 E. LAMAR BOULEVARD, SUITE 400  
ARLINGTON, TX 76011-4125

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER \_\_\_\_\_
- C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

*KEVIN HO  
3672 EDISON WY.  
FREMONT, CA. 94530*

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

*3672 EDISON WY.  
FREMONT, CA.  
94530*

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

*BLITHE HUANG OR  
KEVIN HO*

TELEPHONE NUMBER

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY AMOUNT ENCLOSED \$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

SIGNATURE

DATE

#### FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		

APPROVED BY

DATE

022831

030-38293

Office of Federal & State Materials and  
Environmental Management Programs  
Division of Materials Safety and State Agreements  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

May 17<sup>th</sup>, 2010

To Whom It May Concern,

On behalf of Jenbo USA, LLC, I am writing to submit our federal application for an Exempt Distribution License. Enclosed please find NRC Form 313 in addition to explanatory detail for items 5-11. In addition, please also find the following enclosures to assist in facilitating our federal license:

- 2 copies of our California State distribution license #7798-42
- 2 copies of our Radiation Safety Plan as prepared per State of California, Department of Public Health, Radiologic Health Branch standards
- 2 copies of FEMA radiation safety training certificate for Kevin Ho (Radiation Safety Officer)
- 2 copies of the SGS Verification Report for our MHK-series (double-ended) bulb products
- 2 copies of the SGS Verification Report for our NSK-series (single-ended) bulb products
- 1 check made payable to the 'U.S. Nuclear Regulatory Commission (NRC)' as per the category 3-I fee structure for new licenses

We at Jenbo USA appreciate your every effort to assist us in obtaining our Exempt Distribution License. Please let us know if you require additional information to process this request. Feel free to get in touch with us anytime using the contact information provided below.

Sincerely,

**Blythe Huang, Operations Manager and  
Kevin Ho, Radiation Safety Officer**

Jenbo USA, LLC.

[www.jenbousa.com](http://www.jenbousa.com)

Office: 1 (866) 625-0085

Blythe's Mobile: 1(949) 331-6090

Kevin's Mobile: 1(408) 661-2668

Fax: 1(408) 273-6420

**Warehouse Location & Mailing Address**

3672 Edison Way

Fremont, CA 94538

022831

**NRC Form 313—Application for Materials License  
Exempt Distribution License (New)**

Items 5-11

5) Radioactive Material

A. Element and mass number

- Name – Krypton
- Symbol – Kr
- Mass – 83.798(2)
- Selected isotope – Krypton-85

B. Chemical and/or physical form

- Inert gas

C. Maximum amount which will be possessed at any one time

- Maximum activity of 0.86 microcuries per bulb
- Warehouse stores no more than 250 bulb units at any given time

6) Purpose(s) for which licensed material will be used

- Licensed material consists of two metal halide bulb types
- NSK (single-ended) and MHK (double-ended) bulbs
- Bulb products are stored in Fremont, CA and distributed to buyers throughout the U.S.
- Bulb products are manufactured and assembled in China

7) Individual(s) responsible for radiation safety program and their training experience

- Kevin Ho, Radiation Safety Officer
- Has completed an approved Radiation Safety/Emergency Procedures training course offered online by FEMA (see attached Certificate of Completion)
- Course meets the requirements of the California Department of Public Health, Radiologic Health Branch
- RSO re-training is conducted annually

8) Training for individuals working in or frequenting restricted areas

- The warehouse does not have designated restricted areas and is not accessible to the public
- Warehouse employees receive annual Radiation Safety training updates per the RSO

9) Facilities and equipment

- Please see detail of attached document entitled **‘Jenbo USA Radiation Safety Plan Document for California State Distribution Licensing’**

10) Radiation safety program

- FEMA Independent Study Program: IS-3 Radiological Emergency Management
- <http://training.fema.gov/EMIWeb/IS/is3.asp>

11) Waste management

- Waste disposal is predominantly via ‘Transfer to an authorized recipient’
- Broken, damaged, or unsold overstock of license material is shipped back to original supplier
- Once lamps/bulbs are broken, the gas is released into the atmosphere and the remaining material is no longer considered radioactive
- Other broken or damaged bulb parts may be recycled where facilities exist in compliance with state and local guidelines

## Jenbo USA Radiation Safety Plan Document for California State Distribution Licensing

### I. Radiation Safety Program Audits

#### A. According to NUREG 1556, volume 12, section 8.10.1 'Audit Program'

1. The Radiation Safety Program will be continuously reassessed and updated on an annual basis under the direction of the Radiation Safety Officer (RSO)
2. Occupational dose reductions as well as reductions in public exposure will be considered during the annual review process
3. Warehouse dosimetry (Krypton-85 exposure testing) will be performed by an independent company during annual audit unless otherwise required by state or federal agencies
  - i. Auditors will be third parties from independent agencies
  - ii. Auditors will have training and experience similar to that of authorized user (Radiation Safety Officer)
  - iii. Audits will be conducted annually and more frequent if potential for increased exposure or overexposure exists
4. RSO (licensee) is responsible for oversight of the Radiation Safety Program
5. Records of annual audit history (logbook) will be maintained by the Radiation Safety Officer on the premises where materials are housed

#### B. Radiation Safety Officer will complete, on an annual basis, an approved online Radiation Safety/Emergency Procedures training course, such as that offered by FEMA, which meets the requirements of the California Department of Public Health, Radiologic Health Branch

### II. Radiation Monitoring

#### A. According to NUREG 1556, volume 12, section 8.10.2 'Radiation Monitoring'

1. Licensee will possess radiation monitoring equipment suitable for performing basic dosimetry and will ensure that such equipment is calibrated on an annual basis
2. Radiation Detection Company, Inc. (RDC) will otherwise perform annual calibration of dosimetry devices
3. RSO will receive a TLD-XBGN badge issued by RDC with a quarterly exchange frequency
  - i. <http://www.radetco.com/default.aspx>
  - ii. Radiation Detection Company address and phone: 8095 Camino Arroyo Gilroy, CA 95020 (408)-842-2700

#### C. Monitoring equipment will be in place to assess dose rate surveys and sealed-source leak tests

#### D. We will incorporate the use of a portable or stationary count rate meters

#### E. We will use instruments that meet the radiation monitoring instrument specifications published in Appendix K to NUREG-1556, Vol. 12. We reserve the right to upgrade our survey instruments as necessary.

#### F. Instrument

1. GII Ion Chamber Detector by Apantec, LLC.
2. Measures a range of 100 uR/hr to 100 R/hr
3. [http://apantec.com/ion\\_chamber.asp](http://apantec.com/ion_chamber.asp)

### III. Inventory Procedures

#### A. Limited scope radiation program:

4. Materials are directly received at warehouse from shipper and RSO accepts delivery expeditiously
5. Materials are logged and incoming/outgoing inventory is recorded and tracked on an itemized basis
6. Individuals in the shipping and receiving departments need not use special labeling due to the quantity and nature of Krypton-85 as an inert gas
7. Materials will remain UNOPENED and in original packaging until they are again shipped out to the retailer
8. The materials containing krypton-85 are, at all times, segregated from other items in the shipment
9. Packaging need not contain radioactive placards or labeling due to the quantity and nature of the isotope Krypton-85 as an inert gas

### IV. Material Receipt and Accountability

#### A. According to NUREG 1556, volume 12, section 8.10.3, 'Material Receipt and Accountability'

#### B. RSO will be responsible to:

1. Develop, maintain, and implement procedures for the safe opening of product packages
2. Develop, maintain, and implement procedures to ensure security and accountability of packaged materials
3. Maintain records of receipt, transfer, and disposal of licensed material

### V. Records Maintenance

#### A. According to NUREG 1556, volume 12, section 8.10.8, 'Maintenance'

1. Receipts will be maintained for as long as the material is possessed and until 3 years after transfer or disposal
2. Disposal records will be maintained until NRC terminates the license
3. For licensed materials disposed of as waste will include the radionuclide, activity, date of disposal, and method of disposal
4. **Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license**

#### B. Only trained, experienced, and authorized individuals possess, use or supervise the possession or use of licensed material

#### C. RSO has access to information related to orders for licensed material and the types and amounts of licensed materials requested

### VI. Occupational Doses

#### A. According to NUREG 1556, volume 12, section 8.10.4, 'Occupational Dose'

#### B. A National Voluntary Laboratory Accreditation Program (NVLAP)-approved dosimetry service will provide badges to RSO and other warehouse workers handling packages

1. RSO is responsible for exchanging and processing badges in a timely manner. Also, the
2. RSO is responsible for ensuring that dosimetry results are assigned accurately

#### C. Exposure to sealed sources is not likely to exceed established safe levels

#### D. Activity will not exceed 0.86 microcuries of Krypton-85 per bulb

- E. Bulb products do not pose additional exposure risk to minors or pregnant women
- VII. Operating and Emergency Procedures
- A. According to NUREG 1556, volume 12, section 8.10.6, 'Operating and Emergency Procedures'
- B. Special contamination and personal protective equipment precautions are not necessary with Jenbo-manufactured bulb products
- C. Waste disposal practices:
1. Broken or damaged materials are shipped back to the manufacturing site in original packaging
  2. Other broken or damaged bulb parts are collected in properly-labeled bins for recycling per state and local guidelines
- D. Emergency Contacts:
- Kevin Ho, Radiation Safety Officer: 408-661-2668 (mobile) or 510-402-4270 (warehouse direct line)
- Blythe Huang, Operations Manager: 949-331-6090 (mobile)
- Ethan Huang, Director of Sales: 949-310-6556 (mobile)
1. All questions and concerns are directed to: Spectra Gases Inc. 3434 Route 22 West Branchburg, NJ. 08876
  2. [www.spectragases.com](http://www.spectragases.com)
  3. 24-hour emergency line: (800)-424-9300 or (908)-252-9300 during business hours
  4. Radiologic Health Branch Emergency Call List:
    - i. Radiologic Health Branch (RHB) Emergency Call List below
    - ii. Posted in clear view and accessible to all Jenbo USA staff

**Inspection Agencies: (Day-Time Numbers)**

Region 1: Sacramento - (916) 327-5106 (**Regulatory Agency Headquarters**)

Region 3: Richmond - (510) 620-3416 (**RHB North**)

Region 5: Brea - (714) 257-2025 (**RHB South**)

Region 6: San Diego County Department of Environmental Health - (619) 338-2969

Region 7: Los Angeles County Department of Health Services – (213) 351-7897

Haz Mat **24-Hour** Number: (858) 565-5255

**Office of Emergency Services (OES)\* Numbers (All Emergencies):**

OES Warning Center: 24 Hours (916) 845-8911 or (800) 421-2921 Fax (916) 845-8910

Hazardous Material Spill Hotline: 24 Hours (800) 852-7550

Web: [www.oes.ca.gov](http://www.oes.ca.gov)

- E. Material Safety Data Sheet (MSDS) for Krypton-85 is posted in well-visualized areas throughout the warehouse shipping and receiving departments
- VIII. Security
- A. According to NUREG 1556, volume 12, section 8.10.6, 'Operating and Emergency Procedures'

- B. All licensed materials that are stored in controlled or unrestricted areas are secured from unauthorized access or removal, so that individuals who are not knowledgeable about radioactive materials cannot be exposed to or contaminated by the material, and cannot take the material
- C. Access to licensed materials is restricted to RSO and warehouse personnel only
- D. Licensed materials are under constant surveillance to prevent loss, damage, or theft
- E. All storage areas are securely locked
- F. Workers are trained to be within "line of sight" when licensed materials are in use
- G. All packages are shipped via large U.S. carriers with proper tracking and identification methods on all shipments

IX. Transportation

- A. According to NUREG 1556, volume 12, section 8.10.9, 'Transportation'
- B. Licensed materials fall under 'Limited Quantity' criteria and are therefore exempt from DOT requirements
- C. The shipping and receiving party is clearly identified and documented for each shipment, including company name that possesses the licensed material
- D. RSO is responsible to ensure that licensed material is properly packaging and compliant with NRC and DOT regulations

X. Waste Management

- A. According to NUREG 1556, volume 12, section 8.11 item 11, 'Waste Management'
- B. Waste disposal is predominantly via 'Transfer to an authorized recipient'
  - 1. Broken, damaged, or unsold overstock of license material is shipped back to original supplier
  - 2. Once lamps/bulbs are broken, the gas is released into the atmosphere and the remaining material is no longer considered radioactive
  - 3. Other broken or damaged bulb parts may be recycled where facilities exist in compliance with state and local guidelines

XI. Signs and Labels: Jenbo USA will apply for 'Limited Quantity' placards or labels and these will be affixed to all packages being transported on U.S. roads or via air

**RADIOACTIVE MATERIAL LICENSE**

*in accordance with the provisions of the California Health and Human Services Agency and the California Department of Public Health, Chapter 4, Group 2, Licensing of Radioactive Material License, and the California Code of Regulations, Division 17, Title 17, Chapter 6, Subchapter 4, Group 2, Licensing of Radioactive Material License. This license is hereby issued authorizing the licensee to receive, possess, transfer, or dispose of radioactive material listed below; and to use such radioactive material for the purposes(s) and activities designated below. This license is subject to all applicable rules, regulations, and orders of the California Department of Public Health now or hereafter in effect and to any standard or specific condition specified in this license.*

Licensee	Jenbo USA	3. License Number	7798-42	Amendment Number	
Address	3672 Edison Way Fremont, CA 94538	4. Expiration date	March 4, 2020		
Officer	Kevin Ho Radiation Safety Officer	5. Inspection agency	Radiologic Health Branch North		

Isotope	7. Form	8. Possession Limit
Caesium-137	A. Gas (Sealed Source) Jenbo Lighting International Co., Ltd (China) Model NSK and MHK lamps.	A. 250 lamps not to exceed 0.86 microcuries each. Total not to exceed 0.215 millicuries.

Authorized Use

1. Possession only. Distribution to be authorized by an NRC exempt distribution license.

LICENSE CONDITIONS

Radioactive material shall be stored only at the following location:

- a) 3672 Edison Way, Fremont, CA.

This license is subject to an annual fee for sources of radioactive material authorized to be possessed at any one of the locations specified in Items 6, 7, 8 and 9 of this license. The annual fee for this license is required by and computed in accordance with Title 17, California Code of Regulations, Sections 30230-30232 and is also subject to an annual cost-of-living adjustment pursuant to Section 100425 of the California Health and Safety Code.

Radioactive material shall be used by, or under the supervision of the following individual:

- a) Kevin Ho

Except as specifically provided otherwise by this license, the licensee shall possess and store radioactive material as described in Items 6, 7, 8 and 9 of this license in accordance with the statements, representations, and procedures contained in the documents listed below. The Department's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

The new license application dated June 10, 2009, with attachments, signed by Kevin Ho, Radiation Safety Officer, and supplemented by electronic mails dated October 22, 2009, December 6, 2009, and December 2009, regarding additional information.

The Radiation Safety Officer in this program shall be Kevin Ho.

This license does not authorize commercial distribution of radioactive material.



# Emergency Management Institute



## FEMA

This Certificate of Achievement is to acknowledge that

**KEVIN HO**

has reaffirmed a dedication to serve in times of crisis through continued professional development and completion of the independent study course:

**IS-00003**

**Radiological Emergency Management**

*Issued this 19th Day of May, 2009*

  
Cortez Lawrence, PhD  
Superintendent  
Emergency Management Institute



1-0 IACFI CBU



MAK

Verification Report

No.: GZ0811156667/CHEM

Date: DEC 02, 2008

Page 1 of 13

TAICANG JIEENBAO LIGHTING EQUIPMENT CO., LTD  
NO.77 XINGANG RD, XINMAO DISTRICT, TAICANG CITY, JIANGSU PROVINCE CHINA

Sample Description : Studio lamps  
SGS Ref No. : SZ11437976-4.3  
Model No. (P.O No.) : MHK575, MHK575/D5, MHK1200, MHK575/2, MHK1200/S  
Verification Period : NOV 21, 2008 TO DEC 02, 2008

Verification Requested : With reference to RoHS Directive 2002/95/EC, and its amendment directives

Verification Method  
1. Review was performed for the samples disjointed from the submitted articles and the related test reports submitted by the Applicant  
2. Tests was performed for the samples indicated by the photos in the report with test methods reference to IEC 62321/2nd CDV (111/95/CDV): Procedures for the Determination of Levels of Six Regulated substances in Electrotechnical Products  
(1) Screening by XRF Spectroscopy

Verification Results : Please refer to next page

Verification Conclusion : Based on the review of previous reports and verification results of the submitted samples, the results comply with the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of  
SGS-CSTC Ltd.

Huang Fang, Sunny  
Sr. Engineer

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Guangzhou Testing Service Chemical Laboratory | 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 | t (86-20)82155555 f (86-20)82075113 \* sgs.china@sgs.com

GZCM 2331742

Member of the SGS Group (SGS SA)



Verification Report

No.: GZ0811156667/CHEM

Date: DEC 02, 2008

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Details on Verification

Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
A1	Silvery metal tube w/ black printing	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	
A2	Silvery metal rod (in No.A1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	
A3	Silvery metal part (on No.A2)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	
A4	Transparent glass tube (connected w/ No.A1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	BL		\	\	Comply	
		PBDEs <sup>##</sup>	---		\	\	Comply	
A5	White ceramic (in No.A1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	Comply	
		PBDEs <sup>##</sup>	---		\	\	Comply	
A6	Silvery metal wire (in No.A4)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	
A7	Grey metal wire (connected w/ No.A6)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	

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Member of the SGS Group (SGS SA)



Verification Report

No.: GZ0811156667/CHEM

Date: DEC 02, 2008

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Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
A8	Silvery metal sheet (connected w/ No.A7)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>#</sup>	---		\	\	\	

Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
B1	Golden metal tube	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>#</sup>	---		\	\	\	
B2	Golden metal rod (connected w/ No.B1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>#</sup>	---		\	\	\	
B3	Grey metal wire (connected w/ No.B2)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>#</sup>	---		\	\	\	

Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
C1	Silvery metal part	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>#</sup>	---		\	\	\	
C2	Silvery metal sheet (on No.C1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>#</sup>	---		\	\	\	

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Verification Report

No.: GZ0811156667/CHEM

Date: DEC 02, 2008

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Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
D1	Silvery metal part	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	

Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
E1	Silvery metal part	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	

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Remark

- (1) (a) It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is Cr<sup>6+</sup>.
- (b) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for CrVI) and GCMSD (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321/2nd CDV (111/95/CDV) (unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	BL ≤ (70-3σ) < X < (130+3σ) ≤ OL	BL ≤ (70-3σ) < X < (130+3σ) ≤ OL	LOD < X < (150+3σ) ≤ OL
Pb	BL ≤ (700-3σ) < X < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < X < (1300+3σ) ≤ OL	BL ≤ (500-3σ) < X < (1500+3σ) ≤ OL
Hg	BL ≤ (700-3σ) < X < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < X < (1300+3σ) ≤ OL	BL ≤ (500-3σ) < X < (1500+3σ) ≤ OL
Br	BL ≤ (300-3σ) < X	---	BL ≤ (250-3σ) < X
Cr	BL ≤ (700-3σ) < X	BL ≤ (700-3σ) < X	BL ≤ (500-3σ) < X

- (c) OL = Over Limit, BL = Below Limit, IN = Inconclusive, LOD = Limit of Detection
  - (d) The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition
- (2) (a) mg/kg = ppm=0.0001%, N.D. = not detected (<MDL), --- = not conducted, \ = not available.  
 (b) Unit and Method Detection Limit (MDL) in wet chemical test

Test Items	Pb	Cd	Hg
Units	mg/kg	mg/kg	mg/kg
MDL	2	2	2

The MDL for single compound of PBBs & PBDEs is 5 mg/kg and MDL of Cr<sup>6+</sup> for polymer & composite sample is 2 mg/kg.

- (c) According to IEC 62321/2nd CDV (111/95/CDV), result on Cr<sup>6+</sup> for metal sample is shown as Positive/Negative. Negative = Absence of Cr<sup>6+</sup> coating, Positive = Presence of Cr<sup>6+</sup> coating
- (d) ## = The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2008.

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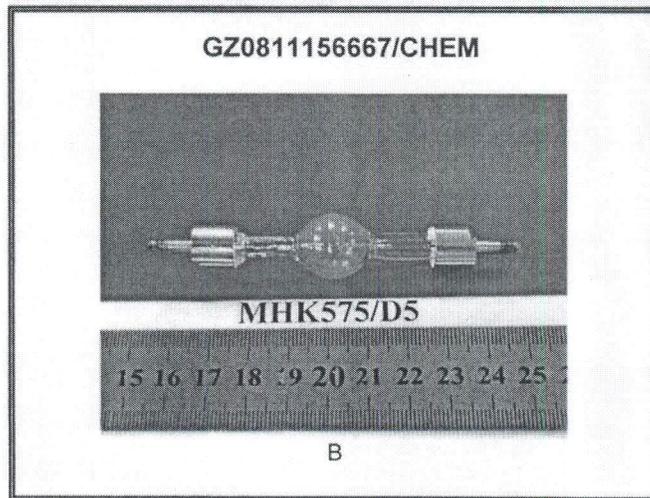
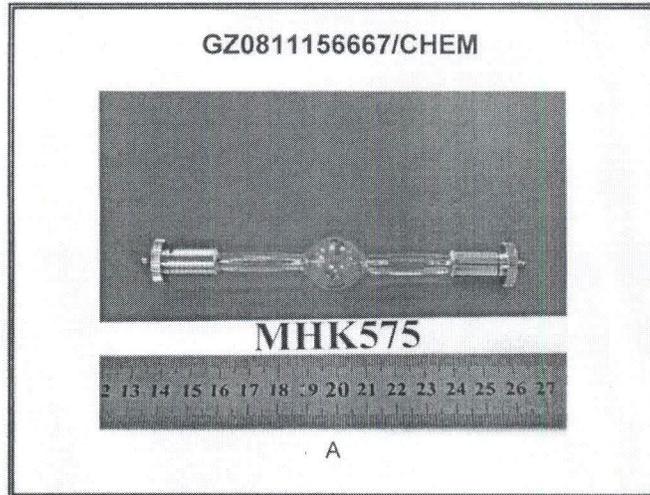
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Photo Index



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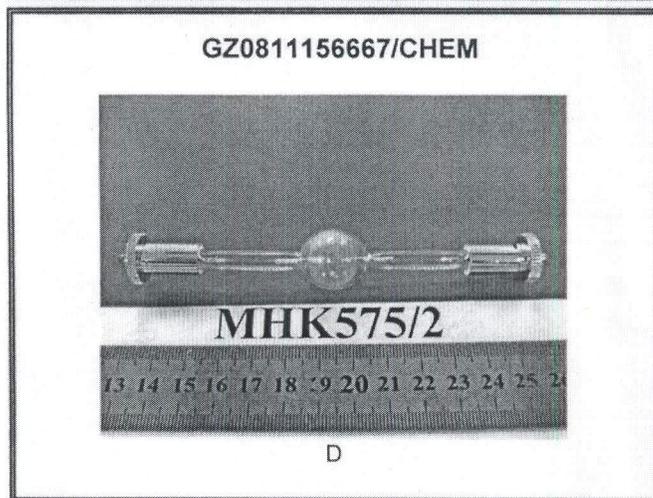
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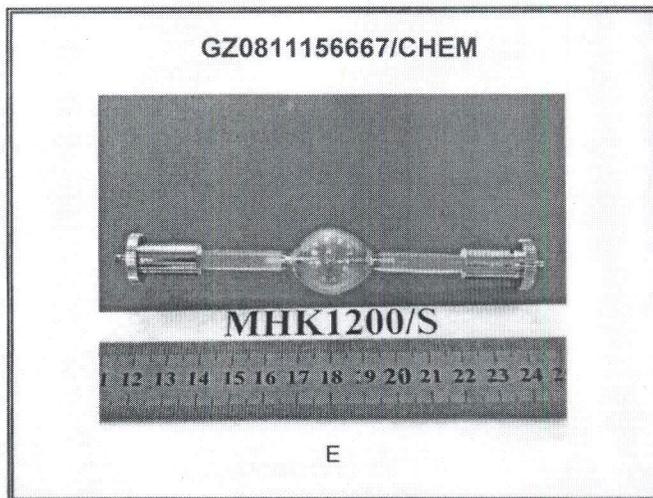


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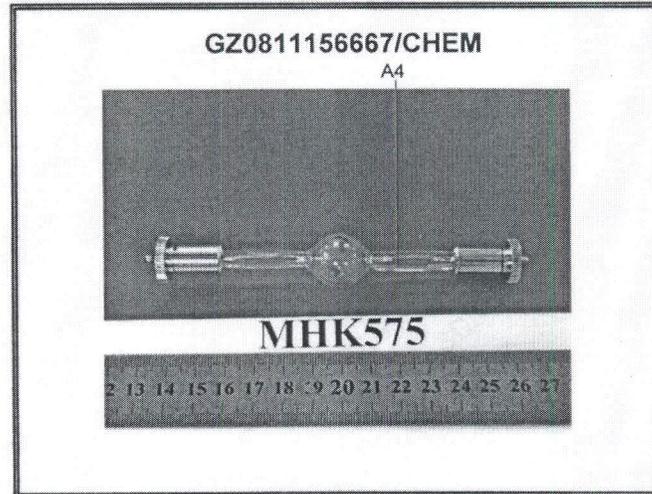
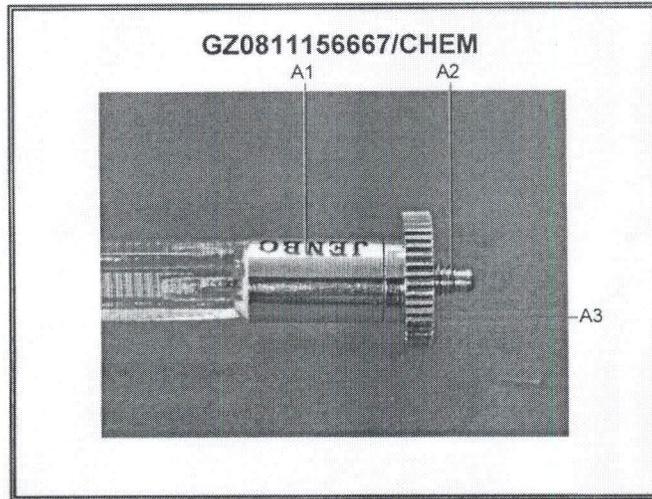


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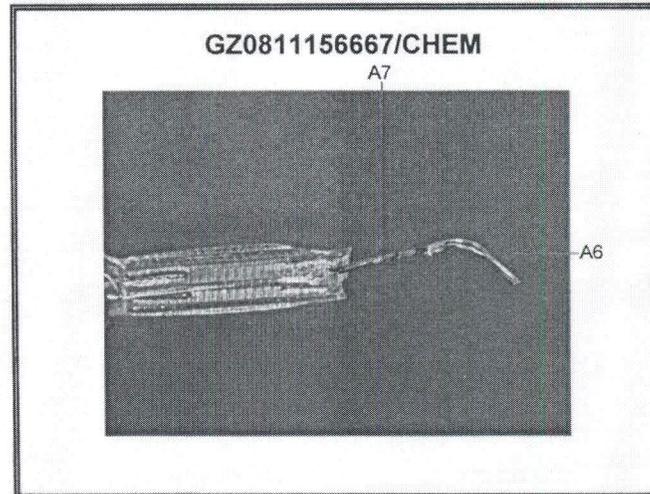
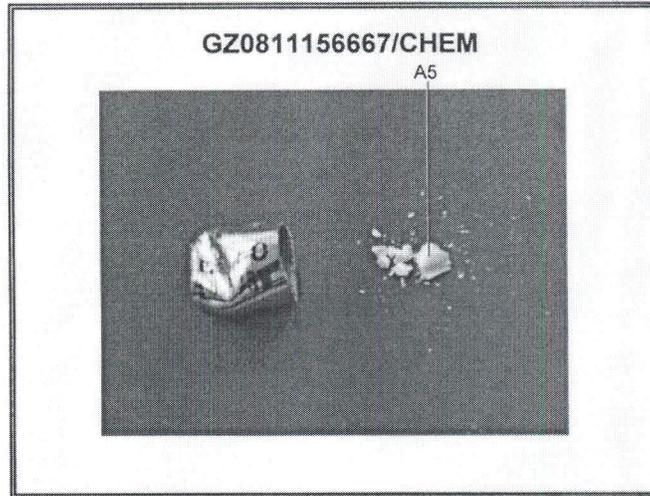
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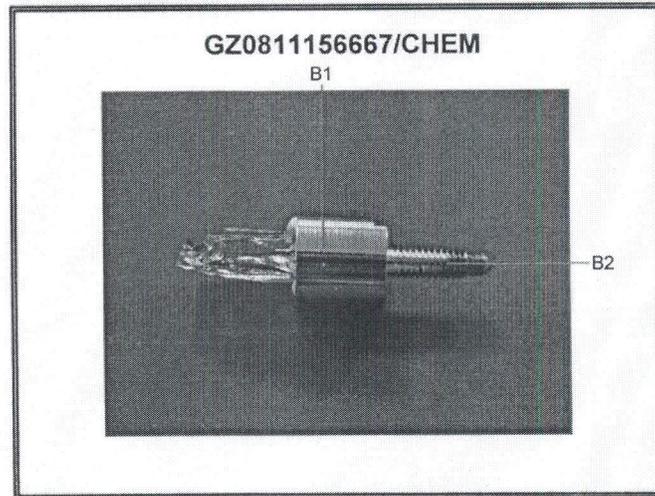
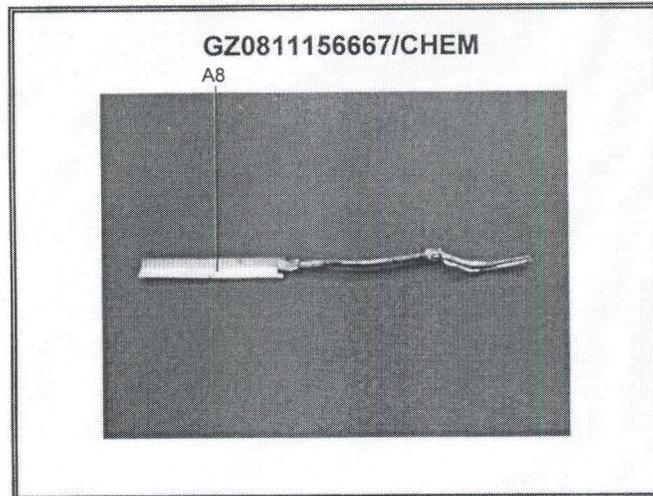
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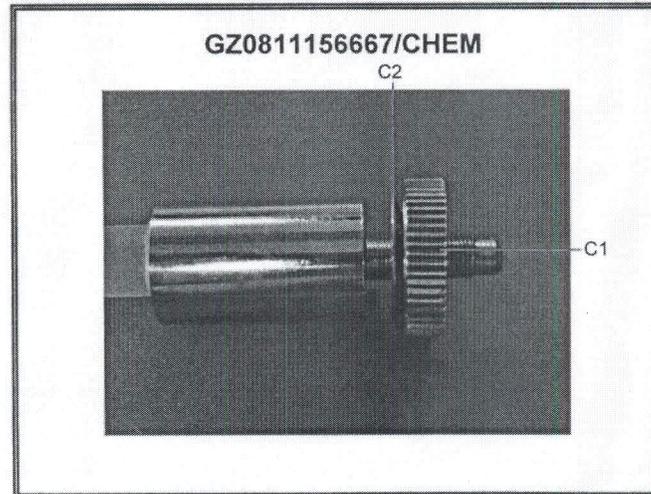
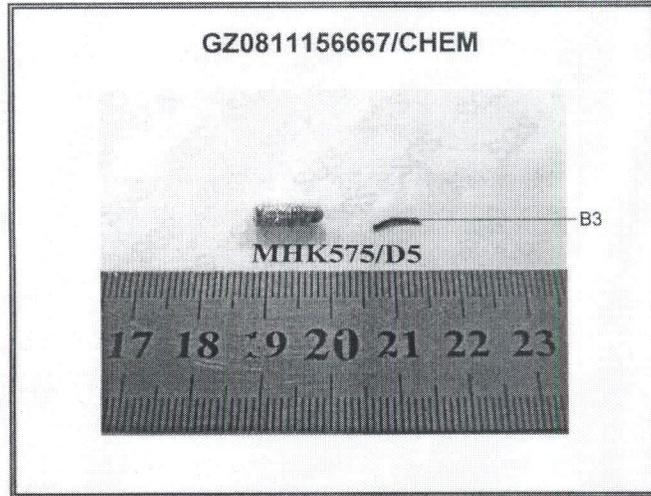


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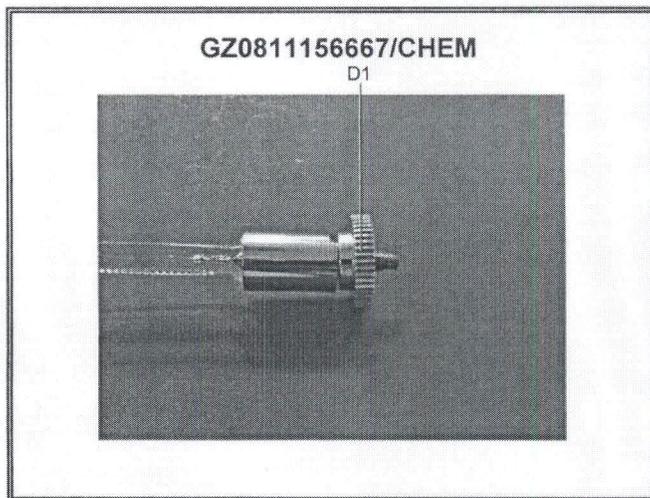


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NSK

Verification Report

No.: GZ0811156606/CHEM

Date: DEC 05, 2008

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TAICANG JIEENBAO LIGHTING EQUIPMENT CO., LTD  
NO.77 XINGANG RD, XINMAO DISTRICT, TAICANG CITY, JIANGSU PROVINCE CHINA

Sample Description : Studio lamps  
SGS Ref No. : SZ11437976-4.1  
Model No. (P.O No.) : NSK250/2, NSK150, NSK575/2  
Verification Period : NOV 21, 2008 TO DEC 05, 2008

Verification Requested : With reference to RoHS Directive 2002/95/EC, and its amendment directives

Verification Method  
1. Review was performed for the samples disjointed from the submitted articles and the related test reports submitted by the Applicant  
2. Tests was performed for the samples indicated by the photos in the report with test methods reference to IEC 62321/2nd CDV (111/95/CDV): Procedures for the Determination of Levels of Six Regulated substances in Electrotechnical Products.  
(1) Screening by XRF Spectroscopy  
(2) Wet Chemical Test Method  
a. Determination of Lead by ICP and AAS.  
b. Determination of Hexavalent Chromium by Colorimetric Method.

Verification Results : Please refer to next page

Verification Conclusion : Based on the review of previous reports and verification results of the submitted samples, the results **comply with** the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of  
SGS-CSTC Ltd.

Huang Fang, Sunny  
Sr. Engineer

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Verification Report

No.: GZ0811156606/CHEM

Date: DEC 05, 2008

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Details on Verification

Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
A1	Beige ceramic part	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	BL				Comply	
		PBBs <sup>##</sup>	BL				Comply	
		PBDEs <sup>##</sup>	BL				Comply	
A2	Silvery metal tube (connected w/ No.A1)	Cd	BL	\	\	Negative	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	IN				Comply	
		PBBs <sup>##</sup>	---				\	
		PBDEs <sup>##</sup>	---				\	
A3	Transparent glass tube (connected w/ No.A1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	BL				Comply	
		PBBs <sup>##</sup>	BL				Comply	
		PBDEs <sup>##</sup>	BL				Comply	
A4	White material (in No.A1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	BL				Comply	
		PBBs <sup>##</sup>	BL				Comply	
		PBDEs <sup>##</sup>	BL				Comply	
A5	Grey metal sheet (in No.A3)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	BL				Comply	
		PBBs <sup>##</sup>	---				\	
		PBDEs <sup>##</sup>	---				\	
A6	Silvery metal wire (long) (connected w/ No.A5)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	BL				Comply	
		PBBs <sup>##</sup>	---				\	
		PBDEs <sup>##</sup>	---				\	
A7	Grey metal wire (short) (connected w/ No.A5)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL				Comply	
		Hg	BL				Comply	
		Cr <sup>6+</sup>	BL				Comply	
		PBBs <sup>##</sup>	---				\	
		PBDEs <sup>##</sup>	---				\	

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Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
A8	Grey metal sheet (connected w/ No.A7)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			
A9	Silvery metal pin (connected w/ No.A8)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			
A10	Silvery metal spring (on No.A9)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			
A11	Silvery metal tube (connected w/ No.A6)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			
A12	Grey metal pin (in No.A11)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			
A13	Silvery metal pin (in No.A2)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			
A14	Silvery metal ring (on No.A2)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	IN		\	Negative	Comply	
		PBBs	---		\	\	\	
PBDEs <sup>##</sup>	---	\	\	\	\			

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Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
B1	White ceramic part	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	BL		\	\	Comply	
		PBDEs <sup>##</sup>	BL		\	\	Comply	
B2	Silvery metal tube (connected w/ No.B1)	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	IN		\	10982 (See remark <sup>(1)</sup> )	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	---		\	\	\	
		PBDEs <sup>##</sup>	---		\	\	\	

Part No.	Part Name	Restricted Substances	Results of EDXRF <sup>(1)</sup>	No. of Related Test Report	Results in Related Test Report(mg/kg)	Result of Wet Chemical Testing <sup>(2)</sup> (mg/kg)	Conclusion on RoHS	Sample Submitted / Resubmitted Date
C1	Beige ceramic part	Cd	BL	\	\	\	Comply	Nov 21, 2008
		Pb	BL		\	\	Comply	
		Hg	BL		\	\	Comply	
		Cr <sup>6+</sup>	BL		\	\	Comply	
		PBBs	BL		\	\	Comply	
		PBDEs <sup>##</sup>	---		\	\	Comply	

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Remark

- (1) (a) It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is Cr<sup>6+</sup>.
- (b) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for CrVI) and GCMSD (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321/2nd CDV (111/95/CDV) (unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	---	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

- (c) OL = Over Limit, BL = Below Limit, IN = Inconclusive, LOD = Limit of Detection
- (d) The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition

- (2) (a) mg/kg = ppm=0.0001%, N.D. = not detected (<MDL), --- = not conducted, \ = not available.
- (b) Unit and Method Detection Limit (MDL) in wet chemical test

Test Items	Pb	Cd	Hg
Units	mg/kg	mg/kg	mg/kg
MDL	2	2	2

The MDL for single compound of PBBs & PBDEs is 5 mg/kg and MDL of Cr<sup>6+</sup> for polymer & composite sample is 2 mg/kg.

- (c) According to IEC 62321/2nd CDV (111/95/CDV), result on Cr<sup>6+</sup> for metal sample is shown as Positive/Negative. Negative = Absence of Cr<sup>6+</sup> coating, Positive = Presence of Cr<sup>6+</sup> coating
- (d) ## = The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2008.

Remark[1]: According to the declaration from client, the source of Lead in No.B2 could be from the copper alloy base, while Lead as an alloying element in copper alloy containing up to 4% Lead by weight is exempted by RoHS regulatory (Directive 2002/95/EC of the European Parliament and of the council of 27 January 2003).

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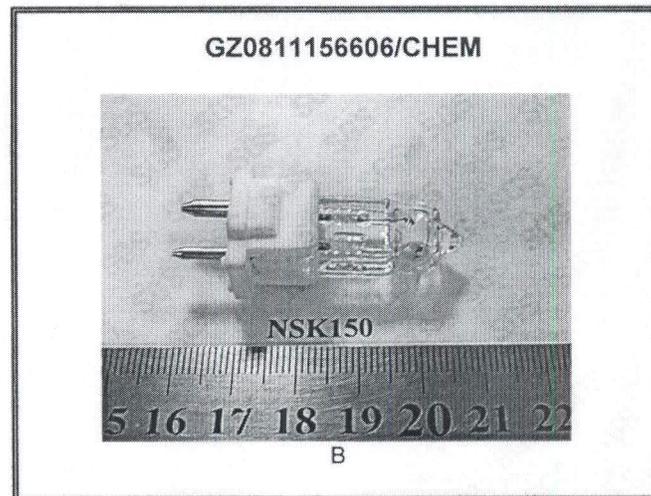
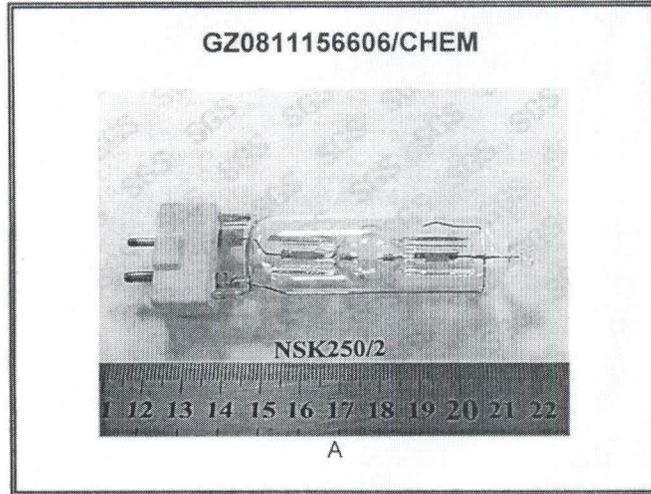
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### Photo Index



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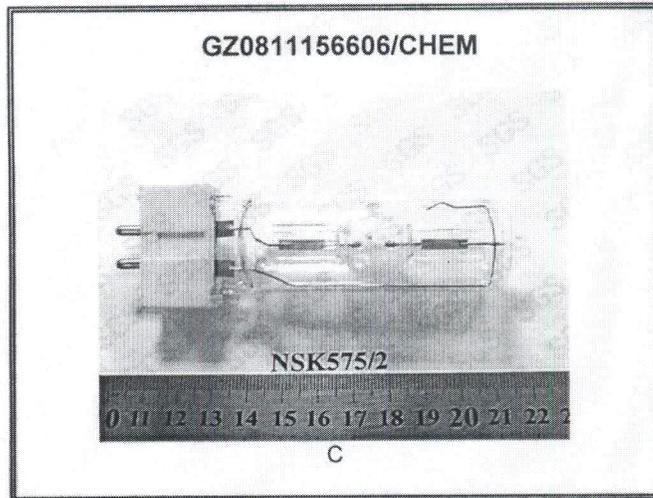


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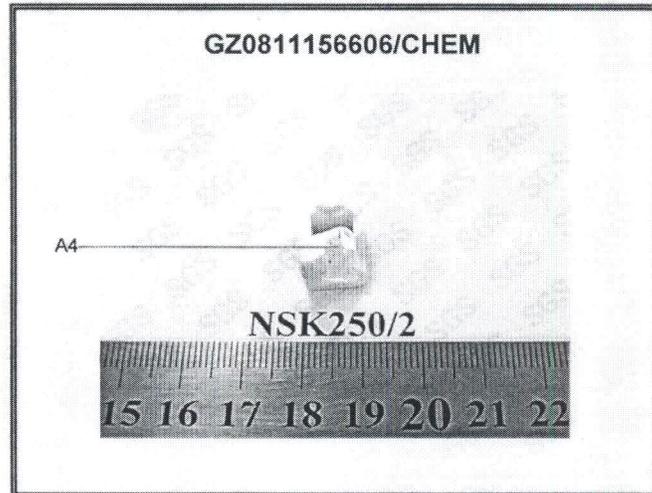
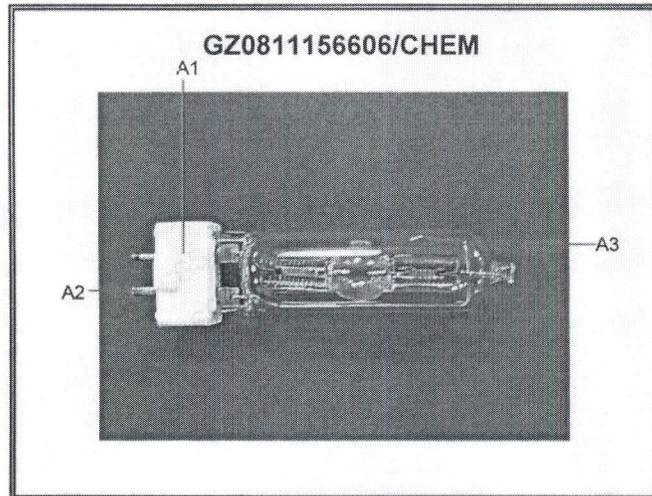
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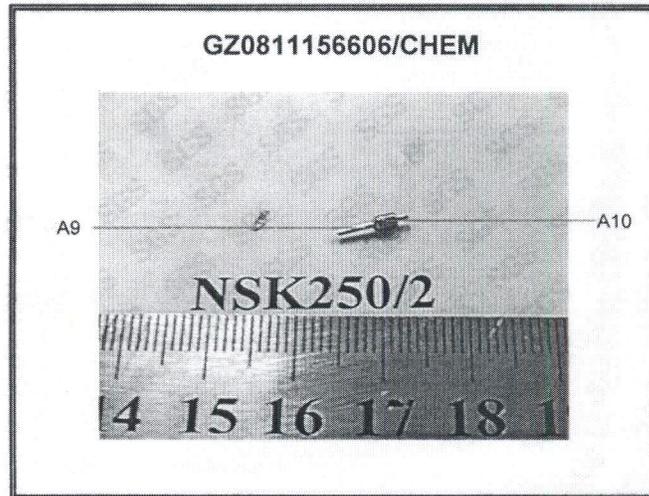
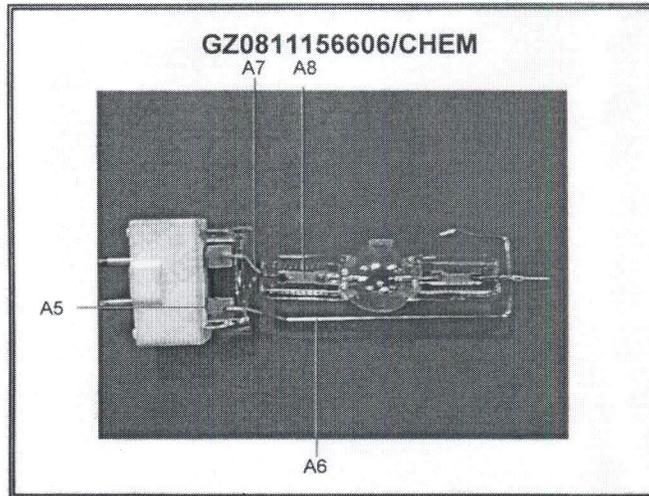
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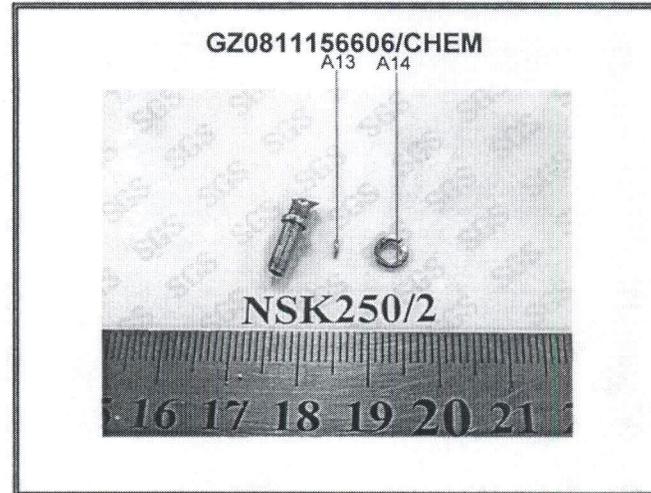
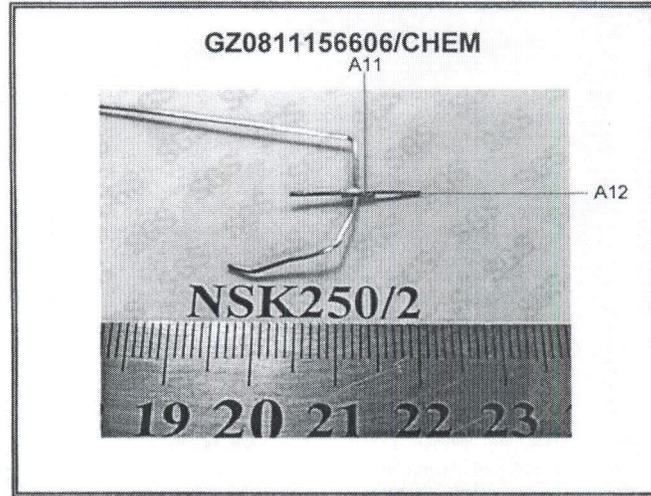
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