HANGZHOU BROLIGHT TECHNOLOGY

BULDING 50, YINHU SCIENCE AND TECHNOLIGY PARK, NO. 15 FUXIAN ROAD, FUYANG DISTRIC, HANGZHOU, CHINA

TELEPHONE: 0571-81902618

SAFETY DATA SHEET

Section 1: Identification

Product Identifier: Spectrum Lamp, Mercury Vapor (Brolight Product No. BEM-5009)
Common Name: Pen type mercury lamp
Recommended Use: Educational, study of spectral lines
Restrictions on Use: Use under supervision of science teacher

Manufacturer Information
Hangzhou Brolight Technology
BUILDING 50, YINHU SCIENCE AND TECHNOLIGY PARK, NO. 15 FUXIAN ROAD, FUYANG DISTRIC, HANGZHOU, CHINA

General and Emergency Phone No.
0571-81902618
Revision Date:
07/17/2018

Section 2: Hazards Identification

Much of the information provided will apply to larger quantities of liquid MERCURY, about 2 mg quantity contained in each of these lamps. The liquid in these lamps is sealed in glass tubes, about 120 mm long by 11.5 mm in diameter, at a pressure small than 1 Torr. Atmospheric pressure is approximately 760 Torr, reduced to sea level.

DANGER! Corrosive. Causes burns to skin, eyes, and respiratory tract. May be fatal if swallowed or inhaled. Harmful if absorbed through skin. Affects the kidneys and central nervous system. May cause allergic skin reaction.

Hazard Classification: Health rating: 4 – Extreme (Life); Flammability Rating: 0 – None Reactivity Rating 1 – Slight; Contact Rating: 3 – Severe (Corrosive)
General Statement: The small amount of mercury contained in each lamp is poses no hazard so long as the lamp is sealed. If the lamp is broken, and the mercury is spilled, consult Section 6: Accidental Release Measures.

Section 3: Composition / Information on Ingredients

CAS: 7439-97-6 **Component:** Mercury **Percent:** 90 **-** 100%, triple distilled, 2 mg by weight
Hazardous: Yes

Section 4: First-Aid Measures

Inhalation: Remove to fresh air. Seek immediate medical advice.
Skin: Wash with soap and water for 15 minutes. Seek immediate medical advice.
Eye Contact: Flush water for several minutes. Then consult with medical advice.
Ingestion: Seek medical treatment.
If lamp broken, treat for cuts and possible burns resulting from lamp if hot.

Section 5: Fire-Fighting Measures

Recommendations for fighting fire caused by the chemical: Not considered to be a fire or explosion hazard. Use any means to extinguish surrounding fire. Contain any water runoff. If the lamp is broken, and the mercury is spilled, consult Section 6: Accidental Release Measures.
Special Information: Smoke may contain toxic mercury or mercuric oxide. Wear suitable respiratory protection.

Section 6: Accidental Release Measures

Recommendations for Personal Precautions and Emergency Procedures: Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away.
Methods and Material Used to Containment and Clean Up: Clean up broken glass and approximately 2 mg of liquid mercury. Absorb with sand, sawdust, or mercury spill kits commercially available.

Section 7: Handling and Storage

Precautions for Safe Handling: Never handle lamp when hot, or energized. Keep away from heat, use indoors, with approved source of power.
Conditions for Safe Storage: Store at room temperature. Protect glass from breakage.
Incompatibilities While Storing: Keep away from any chemical that might attack glass.
Other Precautions: Mercury evaporates very slowly. Spilled mercury forms tiny globules that will evaporate faster than a single pool, and can develop higher concentrations in an unventilated area.

Section 8: Exposure Controls / Personal Protection

Component Exposure Limits: Use in an area providing normal ventilation. Never use in a confined space
Personal Protection: Wear safety glasses when using this product. Observe normal laboratory procedures**.**

Section 9: Physical and Chemical Properties

Physical State: Silver-white liquid metal
Boiling Point: 356.7 °C (1Pa)
Conductivity: $1.04*10^{4}/(cm*\Omega)$
Vapor Density: 7 (air=1)

Melting Point: -38.87 °C (1Pa) **Specific Gravity (water=1):** 13.55
Molecular Weight: 200.59 **Molecular Formula:** Hg

Section 10: Stability and Reactivity

Reactivity: None expected.
Chemical Stability: Stable under recommended storage conditions.
Conditions to Avoid: Avoid open flames, mechanical stress on glass.

Section 11: Toxicological Information

Considerable information exists concerning this information. Consult this data for further Information if mercury spills from this lamp occurs.

Sections 12: Ecological Information

Considerable information exists concerning this subject. Consult this data for further Information if mercury spill from this lamp occurs.

Section 13: Disposal Considerations

Disposal Methods: Dispose of in accordance with all applicable local regulations. Any spilled mercury can be recovered for recycling. Consult local providers for this service.

Sections 14: Transport Information

If transporting this product, consult with your local carrier for further information. Inform them that each lamp contains approximately 2 mg of mercury. Over pack to prevent the lamp from breakage during shipment.

Sections 15: Regulatory Information

Considerable information exists concerning this subject. It may vary from one location to another. Consult this data for further Information.

Section 16: Other Information

The above information is based upon the best information available to us. BROLIGHT shall not be held liable for any claims, losses or damages resulting from reliance on this information. Users should do their own research to determine the suitability of the information for their own use of this product.