



---

# HANGZHOU BROLIGHT TECHNOLOGY

FLOOR 1, BLDG C, KUNLUN SCI PARK, NO.61 BAIJIAYUAN ROAD, HANGZHOU, CHINA

TELEPHONE: 0571-81902618

## SAFETY DATA SHEET

---

---

### Section 1: Identification

---

**Product Identifier:** Spectrum Lamp, Mercury Vapor (Brolight Product No. BC-105070)

**Common Name:** Mercury, Lamp

**Recommended Use:** Educational, study of spectral lines, Light source

**Restrictions on Use:** Use under supervision of science teacher

#### Manufacturer Information

Hangzhou BroLight Technology  
FLOOR 1, BLDG C, KUNLUN SCI PARK,  
NO.61 BAIJIAYUAN ROAD, HANGZHOU, CHINA

#### General and Emergency Phone No.

0571-81902618

#### Revision Date:

03/07/2016

---

### Section 2: Hazards Identification

---

---

Much of the information provided will apply to larger quantities of liquid MERCURY, than the relatively smaller 60 mg quantity contained in each of these lamps. The liquid in these lamps is sealed in glass tubes, about 50 mm long by 10 mm in diameter, at a pressure of about 0.6 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, 60 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 60 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:**  $1.04 \times 10^4 / (\text{cm} \cdot \Omega)$

**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 60 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.