



## ELECTRO-TECHNIC PRODUCTS

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TELEPHONE: 1-773-561-2349

### SAFETY DATA SHEET

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#### Section 1: Identification

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**Product Identifier:** Spectrum Tube, Mercury Vapor (ETP Product No. 20702)  
**Common Name:** Mercury, Quicksilver  
**Recommended Use:** Educational, study of spectral lines  
**Restrictions on Use:** Use under supervision of science teacher

**Manufacturer Information**  
Electro-Technic Products  
4642 N. Ravenswood Ave  
Chicago, IL 60640-4510, USA

**General and Emergency Phone No.**  
773-561-2349  
**Revision Date:**  
06/01/2015

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#### Section 2: Hazards Identification

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Much of the information provided will apply to larger quantities of liquid MERCURY, than the relatively smaller 50 mg quantity contained in each of these tubes. The liquid in these tubes is sealed in glass tubes, about 10.5 in. (27 cm) long by ½ in. (13 mm) in diameter, at a pressure of about 0.15 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 tube is poses no hazard so long as the tube is sealed. If the tube is broken, and the mercury is spilled, consult Section 6: Accidental Release Measures.

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#### Section 3: Composition / Information on Ingredients

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**CAS:** 7439-97-6 **Component:** Mercury **Percent:** 90 - 100%, triple distilled, 50 mg by weight  
**Hazardous:** Yes

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#### Section 4: First-Aid Measures

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**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 w/water for several minutes. Then consult with medical advice.

**Ingestion.** Seek medical treatment.

If tube broken, treat for cuts and possible burns resulting from tube if hot.

**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 tube 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.

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**Section 6: Accidental Release Measures**

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**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 50 mg of liquid mercury. Absorb with sand, sawdust, or mercury spill kits commercially available.

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**Section 7: Handling and Storage**

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**Precautions for Safe Handling:** Never handle tube 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.

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**Section 8: Exposure Controls / Personal Protection**

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**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 normal laboratory procedures.

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**Section 9: Physical and Chemical Properties**

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**Physical State:** Silver-white liquid metal  
**Vapor Pressure:** 0.0018 mmHg @ 25 °C  
**Melting Point:** -38.87 °C  
**Molecular Weight:** 200.59

**Boiling Point:** -356.7 °C  
**Vapor Density (air=1):** 7  
**Specific Gravity (water=1):** 13.55  
**Molecular Formula:** Hg

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**Section 10: Stability and Reactivity**

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**Reactivity:** None expected.

**Chemical Stability:** Stable under recommended storage conditions.

**Conditions to Avoid:** Avoid open flames, mechanical stress on glass

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**Section 11: Toxicological Information**

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

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

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**Section 13: Disposal Considerations**

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**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.

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**Sections 14: Transport Information**

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If transporting this product, consult with your local carrier for further information. Inform them that each tube contains approximately 50 mg of mercury. Over pack to prevent the tube from breakage during shipment.

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**Sections 15: Regulatory Information**

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

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**Section 16: Other Information**

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The above information is based upon the best information available to us. Electro-Technic Products 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.