



ELECTRO-TECHNIC PRODUCTS

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SAFETY DATA SHEET

Section 1: Identification

Product Identifier: Spectrum Tube, Bromine Vapor (ETP Product No. 20102)

Common Name: Bromine

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:

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Section 2: Hazards Identification

Much of the information provided below will apply to larger quantities of BROMINE. Each tube contains a trace amount of bromine vapor in a gaseous state within a sealed glass tube, about 10.5 in. (27 cm) long by ½ in. (13 mm) in diameter, at a pressure of about 0.15 Torr. At these concentrations, and pressures, the bromine vapor is not visibly discernible inside the tube.

DANGER! Strong oxidizer. Causes burns to skin, eyes, digestive and respiratory tract. Severe over-exposure may be fatal.

General Statement: The bromine in each tube is poses no hazard so long as the tube is sealed.

Section 3: Composition / Information on Ingredients

CAS: 7726-95-6 **Component:** Bromine **Percent:** 100%, under low pressure.

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 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.

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.

Section 6: Accidental Release Measures

Recommendations for Personal Precautions and Emergency Procedures:

Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away..

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.

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: Brown liquid at atm pressure

Vapor Pressure: 175 mmHg @ 20 °C

Melting Point: 7 °C

Molecular Weight: 159.81

Boiling Point: 58.8 °C

Vapor Density (air=1) 5.5

Relative Density: 31 g/mL @ 25 °C

Molecular Formula: Br₂

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 11/12: Toxicological/Ecological Information

Considerable information exists concerning for larger amounts of bromine than are contained in this product. Consult this data for further information.

Section 13: Disposal Considerations

Disposal Methods: Dispose of in accordance with all applicable local regulations..

Sections 14: Transport Information

If transporting this product, consult with your local carrier for further information. Over pack to prevent the tube 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. 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..