



ELECTRO-TECHNIC PRODUCTS

4642 N. RAVENSWOOD, CHICAGO, ILLINOIS 60640-4510

TELEPHONE: 1-773-561-2349

FAX: 1-773-561-3130

MATERIAL SAFETY DATA SHEET

IDENTITY: IDENTITY: **Spectrum Tube, Mercury (ETP Product No. 20702)**
Contains approximately 50 mg of liquid mercury

SECTION 1 – IDENTIFICATION – MERCURY

MANUFACTURER OF TUBES:
Electro-Technic Products
4642 N. Ravenswood Ave.
Chicago, IL 60640-4510, USA

TELEPHONE NUMBER: **773-561-2349**
FAX NUMBER: **773-561-3130**

MANUFACTURER OF MERCURY:
Alfa Aesar, A Johnson Matthey Company
30 Bond Street
Ward Hill, MA 01835-8099, USA

GENERAL INFORMATION: **1-800-343-0660**
EMERGENCY **800-343-0660**
AFTER HOURS: **1-866-928-0789 (CARECHEM)**

DATE PREPARED **December 6, 2013**

Information derived from MSDS provided by Alfa Aesar, Reviewed Date 04-24-2013, Printing Date 04-26-2013, the manufacturer/supplier of the mercury used to manufacture this spectrum tube. Visit their web site www.alfa.com.

SECTION 2 – HAZARDS IDENTIFICATION / PER REGULATION (EC) No. 1272/2008

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 tubes 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.

Classifications: Toxic material causing immediate, serious toxic effects. Corrosive material. Per Hazardous Materials Identification System, scale 0-4, Health (acute effects) = 3, Flammability = 0, Reactivity = 0.

Hazard Statement: Fatal if inhaled. May damage fertility or the unborn child. Route of exposure: Oral, inhalation.

Precautionary statements: Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. (This would include, apron, face and eye protection.)

Response: Specific treatment is urgent. See SECTION 4.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with all applicable regulations.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

CAS: 7439-97-6 EC: 231-106-7 Component: MERCURY Amount: Approximately 50 mg per tube

SECTION 4 – FIRST AID MEASURES - MERCURY

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.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA **Product is not flammable.**

SPECIAL FIRE FIGHTING PROCEDURES **Toxic metal oxide fumes possible**

SECTION 6 - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away. Clean up broken glass and approximately 50 mg of liquid mercury. Absorb with sand, sawdust, or mercury spill kits commercially available.

WASTE DISPOSAL METHOD **In accordance with all applicable regulations**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING **Wear gloves/apron/eye and face protection. Do not eat or drink when using. Store in a well-ventilated area. Store locked up.**

INCOMPATIBILITY (MATERIALS TO AVOID) **Metals, halogens**

OTHER PRECAUTIONS **Mercury evaporates very slowly. Spilled mercury forms many tiny globules that will evaporate faster than a single pool, and can develop large concentrations in an unventilated area.**

SECTION 7 – EXPOSURE CONTROLS

PERMISSIBLE EXPOSURE LIMIT (US): **0.1 mg/m³**

SECTION 8 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT **356.73 °C** **SPECIFIC GRAVITY (H₂O=1)** **13.534**

VAPOR PRESSURE (20 °C) **0.00163 hPa** **MELTING POINT** **-38.87 °C**

SOLUBILITY IN WATER **Insoluble** **APPEARANCE AND ODOR** **Silver liquid, odorless**

SECTION 9 – STABILITY AND REACTIVITY DATA

STABLE (Y/N) **Y** **HAZARDOUS POLYMERIZATION (Y/N)** **N**

HAZARDOUS DECOMPOSITION COMBUSTION **Toxic metal oxide fume**

INCOMPATIBLE MATERIALS **Aluminum & copper and their alloys, magnesium, halogens**

Consult the MSDS published by Alfa Aesar on their web site, www.alfa.com, for further information.

Leak Testers, Corona Treaters, Science Education Products

web site: www.electrotechnicproduct.com

e-mail: sales@electrotechnicproduct.com