

# MATERIAL SAFETY DATA SHEET

*Product Name:* Conductive Silver Epoxy (part B)

*Catalog Number:* 60802 part B (Hardener)

*DOT Hazard Class:* Not Hazardous

*MSDS Prepared:* 9/2011

*Distributed By:* Ladd Research

83 Holly Court

Williston, VT 05495

(802) 658-4961

## HAZARDOUS COMPONENTS

	<i>CAS Number</i>	<i>Percent</i>	<i>Exposure Limits</i>
Silver (metallic)	7440-22-4	60-90%	0.1 mg/m <sup>3</sup> ACGIH TLV 0.1mg/m <sup>3</sup> OSHA PEL
Modified Aliphatic Amine	140-31-8	10-25%	NA

## PHYSICAL AND CHEMICAL DATA

*Physical State:* Silver/gray paste

*Odor:* Amine

*Vapor Pressure:* <1.0 mmHg @ 20°C

*Percent Volatile:* <0.5%

*Solubility in Water:* Partially Soluble

*Specific Gravity:* 2.5-2.8

*Evaporation Rate:* <1 (butyl acetate=1)

*Boiling Range:* >400°F

## FIRE AND EXPLOSION HAZARD DATA

*Flash Point:* >200°F (Setaflash)

*LEL/UEL:* 0.9%/NA

*Extinguishing Media:* Use carbon dioxide or dry chemicals for small fires, aqueous foam or water fog for large fires involving this material.

*Fire Fighting Instructions:* Remove all ignition sources. As in any fire, wear self-contained breathing apparatus and full protective gear.

## HEALTH HAZARD DATA

*Eyes:* Liquid and vapors of this product may cause chemical burns in the eye. Damage is irreversible.

*Skin:* Contact may cause chemical burns. Sensitizer – may cause allergic skin reaction.

*Ingestion:* Harmful if swallowed. May cause chemical burn in the gastrointestinal tract and may be potentially toxic. Silver ingestion may result in generalized argyria.

*Inhalation:* Harmful if inhaled. High concentrations in immediate area can cause respiratory irritation if inhaled. May cause allergic respiratory reaction.

*Pre-Existing Medical Conditions Aggravated by Exposure:* Heart, lung, eye, skin

## EMERGENCY AND FIRST AID

*Eyes:* Immediately flush with large amounts of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined by physician.

*Skin:* Remove contaminated clothing and wash skin with soap and water. Get medical attention

if irritation develops.

*Ingestion:* If swallowed, seek medical attention. Neutralize with milk or dilute with water.

*Inhalation:* In case of exposure to high concentrations of vapor or mist, remove to fresh air. If breathing is difficult, give oxygen and call a physician. If breathing has stopped, apply artificial respiration and call a physician.

**REACTIVITY DATA**

*Stability:* Stable under normal conditions.

*Conditions to Avoid:* Excessive heat. Contamination with strong acids, bases, epoxy resins or isocyanates can cause polymerization.

*Incompatibility:* Avoid epoxy resins and isocyanates, strong acids, strong bases, caustics and alkali contamination.

*Products of Decomposition:* Carbon monoxide, carbon dioxide and oxides of nitrogen.

*Hazardous Polymerization:* Will not occur.

**SPILL, DISPOSAL AND STORAGE INFORMATION**

*Spills:* Absorb spill with absorbent material, then place in a chemical waste container for proper disposal.

*Disposal:* Dispose of in accordance with federal, state and local regulations.

*Storage:* Store in a cool, dry place. Do not breathe vapor. Do not store in direct sunlight.

**PROTECTIVE EQUIPMENT AND CONTROL MEASURES**

Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

**SECTION 313 SUPPLIER NOTIFICATION**

**Not applicable.**

\*\*\*\*\*

The information presented is believed to be correct and is the most accurate information available to us at this time. However, Ladd Research makes no warranty, express or implied, and assumes no liability for this information and the product described herein.