

# MATERIAL SAFETY DATA SHEET

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

*Catalog Number:* 60802 part A (adhesive)

*DOT Hazard Class:* Not Hazardous

*MSDS Prepared:* 9/2011

*Distributed By:* Ladd Research

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## 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 0.1 mg/m <sup>3</sup> OSHA PEL
Epoxy Resin	025068-38-6	10-25%	NA
Modified Epoxy Ester	mixture	1-3%	NA

## PHYSICAL AND CHEMICAL DATA

*Physical State:* Silver/gray paste

*Odor:* Mild

*Vapor Pressure:* <0.10 mmHg @ 20°C

*Percent Volatile:* <0.5%

*Solubility in Water:* <10%

*Specific Gravity:* 2.5-2.8

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

*Boiling Range:* >200°F

## FIRE AND EXPLOSION HAZARD DATA

*Flash Point:* >200°F

*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 eye injury which may persist for several days.

*Skin:* Contact may cause reddening and swelling. Sensitizer – may cause allergic skin reaction.

*Ingestion:* Harmful if swallowed. Resin is slightly toxic. Silver ingestion may result in generalized argyria.

*Inhalation:* No specific information available.

*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 appreciable amounts are swallowed, seek medical attention.

*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:* Storage above 120°F, exposure to light, loss of dissolved air, loss of polymerization, inhibitor, contamination with incompatible materials. Polymerization initiators including peroxides, strong oxidizing agents, copper, copper alloys, carbon steel, iron, rust or strong bases.

*Incompatibility:* Avoid strong oxidizing agents, copper, copper alloys, carbon steel, iron and rust. Avoid strong acids and bases. Also avoid caustics, amines, alkalis and mercaptans.

*Products of Decomposition:* Carbon monoxide, carbon dioxide.

*Hazardous Polymerization:* May 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.

**PROTECTIVE EQUIPMENT AND CONTROL MEASURES**

Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLV's during the use of this product. Wear safety glasses with side shields or goggles and rubber or other chemically resistant gloves when handling this material.

**SECTION 313 SUPPLIER NOTIFICATION**

**Not applicable.**

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