

MATERIAL SAFETY DATA SHEET

Product Name: Conductive Silver Pen
Catalog Number: 60803 and 60804
DOT Hazard Class: Not hazardous as packaged
MSDS Prepared: 9/2011

Distributed By: Ladd Research
83 Holly Court
Williston, VT 05495
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HAZARDOUS COMPONENTS

	<i>CAS Number</i>	<i>Percent</i>	<i>Exposure Limits</i>
Silver	7440-22-4	35-65%	0.1 mg/m ³ (ACGIH TWA)
Propylene Glycol Methyl Ether Acetate	108-65-6	2.0-20%	Not available
Ethylene Glycol Monobutyl Ether Acetate	112-07-2	2.0-20%	Not available
n-Butyl Acetate	123-86-4	5.0-35%	150ppm (ACGIH TWA)
acrylic resin	mixture	15-40%	Not available

PHYSICAL AND CHEMICAL DATA

Physical State: Silver colored paint
Odor: Aromatic hydrocarbon
Vapor Pressure: 5-6 mm Hg @ 20°C
Percent Volatile: 30-40%
Vapor Density (air=1): >1
Solubility in Water: >10%
Specific Gravity: 1.8-2.0
Evaporation Rate (butyl acetate=1): >1
Boiling Range: 259-378°F

FIRE AND EXPLOSION HAZARD DATA

Flash Point: 76°F
LEL/UEL (% by volume in air): 1.5/10.0
Extinguishing Media: Use alcohol foam, water foam, carbon dioxide, dry chemical or water spray.

HEALTH HAZARD DATA

Eyes: Irritation. Liquid may cause tearing, redness, swelling or temporary corneal damage.
Skin: Irritation. Prolonged contact may cause dermatitis.
Ingestion: Harmful if swallowed. May cause nervous system depression.
Inhalation: Harmful. May cause headache, nausea, vomiting, dizziness, drowsiness, irritation of the respiratory tract/mucous membranes.

EMERGENCY AND FIRST AID

Eyes: Immediately flush eyes with water. Consult physician if discomfort persists.

Skin: Wash skin with soap and water. Consult physician if discomfort persists.
Ingestion: If swallowed, give two or more glasses of water immediately. DO NOT induce vomiting. Get medical attention.
Inhalation: Remove patient to fresh air. If breathing is difficult, give oxygen and call physician. If breathing has stopped, perform rescue breathing and call 911.

REACTIVITY DATA

Stability: Stable.
Conditions to Avoid: Avoid heat, sparks, open flame and strong oxidizing conditions.
Incompatibility: Do not mix strong oxidizers, acids, bases, caustics, amines and alkali contamination.
Products of Decomposition: Oxides of carbon, oxides of nitrogen, monomers and smoke.
Hazardous Polymerization: Will not occur.

SPILL, DISPOSAL AND STORAGE INFORMATION

Spill: Absorb spill with absorbent material, then place in a chemical waste container for proper disposal.
Disposal: Dispose of in accordance with all federal, state and local regulations.
Storage: Store in a cool dry place, away from heat, sparks or flames. Keep container tightly closed when not in use. Do not store in direct sunlight.

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

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.