# **MATERIAL SAFETY DATA SHEET**

DIEMAT, INC, 19 CENTRAL ST, BYFIELD, MA 01922 USA +1 (978) 499-0900

Date Revised: May 4, 2010

## 1. Identification of the substance/preparation and of the company/undertaking

### 1.1 Identification of the substance/preparation

Product #:DM6030Hk/F954Description:Silver Epoxy Paste

## 1.2 Company/undertaking identification

<b>Company:</b>	Diemat, Inc.
Address:	19 Central St., Byfield, MA 01922 USA
<b>Telephone Number:</b>	+1 (978) 499-0900

### 1.3 Emergency telephone number

**CHEMTREC** +1 (800) 262-8200

# 2. Composition/information on ingredients

#### (OSHA regulated ingredients)

CAS Reg. #	<u>Material</u>	<u>Wt. %</u>	OSHA PEL
7440-22-4	Silver	80-90	0.01 mg/m <sup>3</sup>
8000-41-7	Trimethylcyclohexene methanol	5-15	None
5493-45-8	Hexahydrophthalic acid diglycidyl ester	2-8	None

## 3. Hazards identification

Inhalation: Excessive inhalation of vapors or dust may cause irritation to the eyes and respiratory tract, and may cause headaches, dizziness, and nausea. Chronic exposure may cause pulmonary fibrosis with symptoms of cough, dyspnea, and wheezing. See also: Health effects of silver noted below in this section.

Ingestion:	May cause nausea, vomiting, diarrhea, and abdominal pain. See also: Health effects of silver noted below in this section.
Eye Contact:	Mild irritation or redness, may be corrosive. See also: Health effects of silver noted below in this section.
Skin Contact:	Frequent or prolonged exposure may cause defatting, cracking and possible dermatitis. Overexposure can cause an allergic reaction evidenced by rashes, swelling, or itching.

**Effects of Overexposure to Silver:** Repeated long-term exposure to silver dust by ingestion or inhalation can cause permanent skin effects (blue-grey staining of eyes, mouth, throat and skin, known as "argyria"), eye damage and brain damage.

# 4. First-aid measures

Inhalation:	Immediately remove affected victim from exposure. Administer artificial respiration if breathing is stopped. Call for prompt medical attention.
Ingestion:	If swallowed, give at least 3-4 cups of water, but do not induce vomiting. Never give anything by mouth to an unconscious person. Seek prompt medical attention.
Eye Contact:	Flush eyes with large amounts of water, and seek immediate medical attention.
Skin Contact:	Wipe away excess material with dry towel. Wash affected areas with soap and water. Seek medical attention if irritation develops. Remove and clean any contaminated clothing before reuse.
5. Fire-fighting measu	res

Extinguishing Media:	Foam, Carbon Dioxide, Dry Chemical
Special Firefighting Procedures:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Hazardous Combustion Products:	Carbon Monoxide, Aldehydes, Nitrogen Oxides

# 6. Accidental release measures

	Personal pre	ecautions:	If material is spilled, remove all sources of ignition and ventilate area.
	Environmen precautions:		Place in sealed container for precious metal reclaim.
	Methods for	cleaning:	Apply absorbent material or sand and transfer to waste containers. Should waste disposal be necessary, consult and follow federal, state, and local waste regulations.
7. Handling and storage			
7.1	Handling:	Avoid inhalation of mists or vapors. Provide sufficient local mechanical exhaust ventilation.	
7.2	Storage:	Avoid inh	nalation of mists or vapors. Keep container closed when

not in use. Prevent any moisture contamination.

# 8. Exposure controls/personal protection

Respiratory protection:	NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.	
Hand protection:	Wear chemical or solvent resistant gloves.	
Eye protection:	Wear chemical splash goggles.	
Skin protection:	Wear chemical or solvent resistant gloves. Provide facilities for washing.	

# 9. Physical and chemical properties

Appearance:	Silver Paste
Odor:	Slight Pine
pH:	N/A
<b>Boiling Point/boiling range:</b>	210°C-215°C
Melting Point/melting range:	N/A
Flash point:	93°C
Flammability:	HMIS Rating: 1
Autoflammability:	N/A
Explosive properties:	N/A
Oxidizing properties:	N/A
Vapor pressure:	1.0 mmHg @ 20°C
Relative density:	4.5
Water Solubility:	Insoluble

Fat solubility:	N/A
Partition coefficient:	N/A
Other data	
<b>Evaporation Rate:</b>	<1.0 (Butyl Acetate = 1)
Vapor Density:	0.5 (Air = 1)
% Volatile:	5-15

## **10. Stability and reactivity**

Stability:	Stable
Conditions to avoid:	Elevated temperatures
Materials to Avoid:	Strong oxidizing agents, acids and alkalies.
Hazardous Decomposition Products:	Carbon Monoxide, Carbon Dioxide, Aldehydes, Nitrogen Oxides
Polymerization:	Will not occur under normal conditions.

# 11. Toxicological information

No toxicological studies have been carried out on this product.

## 12. Ecological information

No environmental or ecotoxicological studies have been carried out on this product.

# **13. Disposal considerations**

Do not dispose of material near water supplies as it may cause contamination. Consult applicable acts, laws and regulations, including local, for allowable disposal methods. Disposal shall be made in compliance with those acts, laws and regulations.

## 14. Transport information

No special precautions are necessary.

## **15. Regulatory information**

This product contains the following EPCRA section 313 chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and

Community Right-To-Know Act of 1986 (40 CFR 372): Silver compounds. See section 2 of this MSDS for compositional percentages.

Toxic Substance Control Act (TSCA) Status:

All ingredients of this product are listed on the TSCA inventory or are exempted from listing because a low volume exemption has been granted in accordance with 40 CFR 723.50.

# 16. Other information

Material TLV and PEL pertain to particulates and dust. Silver pastes eliminate airborne particulates via encasement in an organic medium. The dried or cured material should not be abraded or ground to avoid generating significant airborne contamination. If the cured material needs to be abraded, it should be done under a vented fume hood so that particulate inhalation potential is eliminated.

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