

# MATERIAL SAFETY DATA SHEET



**Date-Issued :** 05/16/2005  
**MSDS Ref. No :** 1978  
**Date-Revised :** 01/24/2006  
**Revision No :** 1

## Silicone-free Heat Sink Compound

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Silicone-free Heat Sink Compound  
**PRODUCT DESCRIPTION:** Silicone-free Heat Sink Compound  
**PRODUCT CODE:** 1978-1, 1978-DP

#### MANUFACTURER

Techspray, L.P.  
 1001 N.W. 1st Street  
 P.O. Box 949  
 Amarillo, TX 79107  
**Contact:** Chemtrec  
**Product Stewardship:** 1-800-858-4043

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (US Transportation) :** (800) 424 - 9300  
**CANUTECH (Canadian Transportation) :** (613) 996 - 6666  
**Emergency Phone :** (800) 858 - 4043

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Content</u>	<u>CAS</u>	<u>EINECS</u>
Zinc oxide	< 70	1314-13-	2
NJ Trade Secret Reg. #00840600-5000P	15 - 20		
NJ Trade Secret Reg. #00840600-5001P	10 - 15		
NJ Trade Secret Reg. #00840600-5002P	3 - 5		

#### EEC LABEL SYMBOL AND CLASSIFICATION

Currently not classified according to EEC Directives.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Odorless white paste

#### POTENTIAL HEALTH EFFECTS

**EYES:** Avoid contact with eyes; may cause redness, irritation and conjunctivitis.

**SKIN:** Prolonged or repeated contact may cause skin irritation.

**SKIN ABSORPTION:** None Expected.

**INGESTION:** Not yet Determined

**INHALATION:** Not yet Determined

#### **SIGNS AND SYMPTOMS OF OVEREXPOSURE**

**EYES:** Symptoms of overexposure include: stinging, tearing, redness and pain.

**SKIN:** Prolonged or exposure may cause skin irritation.

**SKIN ABSORPTION:** None Expected.

**INGESTION:** Ingestion may result in diarrhea and/or nausea.

**INHALATION:** None Expected.

**ACUTE TOXICITY:** Low hazard for usual industrial or commercial handling.

**CHRONIC:** Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

**CARCINOGENICITY:** NOT listed

**MUTAGENICITY:** Not yet Determined

#### **REPRODUCTIVE TOXICITY**

**REPRODUCTIVE EFFECTS:** NOT listed

**TERATOGENIC EFFECTS:** Not yet Determined

**CANCER STATEMENT:** NOT listed

**COMMENTS:** Zinc oxide component (USP) is in paste form and does not exhibit a dust hazard.

---

## **4. FIRST AID MEASURES**

**EYES:** Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**SKIN:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**INGESTION:** If swallowed, do not induce vomiting. If conscious and alert, give two glasses of water. Seek medical attention.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

---

## **5. FIRE FIGHTING MEASURES**

**FLASHPOINT AND METHOD:** 296°C (565°F)

**FLAMMABLE LIMITS:** Not Determined to Not Determined

**AUTOIGNITION TEMPERATURE:** Not Available

**EXTINGUISHING MEDIA:** Water, foam, dry chemical, carbon dioxide.

**EXPLOSION HAZARDS:** None Expected.

**FIRE FIGHTING PROCEDURES:** Evacuate area and fight fire from a safe distance.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None Expected.

## 6. ACCIDENTAL RELEASE MEASURES

**LARGE SPILL:** Clean up spills immediately, observing precautions in Protective Equipment section.

**GENERAL PROCEDURES:** Vacuum or sweep up material and place in a disposal container.

**RELEASE NOTES:** Spills and releases may have to be reported to Federal and/or local authorities.

**SPECIAL PROTECTIVE EQUIPMENT:** Only personnel equipped with proper respiratory and skin/eye protection should be permitted in area. See Section 8 for details.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Wash thoroughly after handling. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Store in a cool dry place.

**STORAGE PRESSURE:** Store at local atmospheric pressure.

**STORAGE TEMPERATURE:** Store in adequate storage area at ambient temp.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

<u>Chemical Name</u>	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier OEL</u>	
	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>
Zinc oxide						

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**SKIN:** Not Applicable

**RESPIRATORY:** Not Applicable

**WORK HYGIENIC PRACTICES:** Avoid contact with eyes. Avoid fume inhalation. Limit skin contact.

**OTHER USE PRECAUTIONS:** Emergency shower and eyewash facility should be in close proximity.

**COMMENTS:** This material is in paste form; zinc oxide does not pose a dust hazard.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Semisolid

**ODOR:** None

**APPEARANCE:** Gray Solid with low odor

**pH:** NA = Not Applicable

**PERCENT VOLATILE:** Not Established

**VAPOR PRESSURE:** < 0.1 mmHg

**VAPOR DENSITY:** Not Applicable

**BOILING POINT:** > 204°C (400°F)

**FREEZING POINT:** Not Applicable

**SOLUBILITY IN WATER:** Insoluble

**EVAPORATION RATE:** < 0.01 (n-Butyl Acetate=1)

**SPECIFIC GRAVITY:** 2.7 (water=1)

**VISCOSITY:** Not Available

---

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions.

**POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.

**INCOMPATIBLE MATERIALS:** Oxidizing materials.

---

## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** No data available. Contact Env. Dept.

**SKIN EFFECTS:** No data available. Contact Env. Dept.

---

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No data available. Contact Env. Dept.

**ECOTOXICOLOGICAL INFORMATION:** Not Applicable

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Federal, State, and Local laws governing disposal of materials can differ. Ensure compliance with proper authorities before disposal.

---

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Nonhazardous

### ROAD AND RAIL (ADR/RID):

**HAZARD CLASS:** Not Regulated

### AIR (ICAO/IATA)

**PROPER SHIPPING NAME:** Nonhazardous

### VESSEL (IMO/IMDG)

**PROPER SHIPPING NAME:** Nonhazardous

---

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** NOT listed

**FIRE: NO PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: NO CHRONIC: NO**

**313 REPORTABLE INGREDIENTS:** None

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** NOT listed

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** None of the ingredients are CERCLA/Superfund hazardous chemicals.

**OSHA HAZARD COMM. RULE:** Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### CLEAN AIR ACT

**40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION:** NOT listed

### OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

**29 CFR 1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS:** None of the chemicals in this product are considered highly hazardous by OSHA.

## CANADA

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** No data available.  
Contact Env. Dept.

**WHMIS CLASS:** NOT listed

## EUROPEAN COMMUNITY

### EEC LABEL SYMBOL AND CLASSIFICATION

Currently not classified according to EEC Directives.

---

## 16. OTHER INFORMATION

**APPROVED BY:** Pierce A. Pillon    **TITLE:** Chemist

**PREPARED BY:** Pierce Pillon

**REVISION SUMMARY** Revision #: 1 This MSDS replaces the May 25, 2005 MSDS. Any changes in information are as follows:

### NFPA CODES

