



# MATERIAL SAFETY DATA SHEET

**Date Issued:** 05/16/2005  
**MSDS No:** 1978  
**Date Revised:** 11/16/2011  
**Revision No:** 5

## 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  
**Emergency Contact:** Chemtrec  
**Emergency Phone:** 1-800-858-4043  
**Service Number:** 1-800-858-4043

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC CCN#21858 (US Transportation) :**(800) 424 - 9300  
**CANUTEC (Canadian Transportation) :**(613) 996 - 6666  
**Emergency Phone :**(800) 858 - 4043

### 2. HAZARDS IDENTIFICATION

#### HAZARD DESIGNATION

#### 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 EFFECTS:** 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.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
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	

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

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

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 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

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

**SOLUBILITY IN WATER:** Insoluble

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

**SPECIFIC GRAVITY:** 2.700 (water=1)

**VISCOSITY:** Not Available

**(VOC):** Exempt due to vapor pressure.

### 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

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**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)

**SHIPPING NAME:** Nonhazardous

#### VESSEL (IMO/IMDG)

**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.

##### 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.

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

#### CANADA

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

**WHMIS CLASS:** NOT listed

#### EUROPEAN COMMUNITY

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### 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:** This MSDS replaces the 03/16/2011 MSDS.

#### HMIS RATING

<b>HEALTH</b>	<input type="checkbox"/>	<b>1</b>
<b>FLAMMABILITY</b>	<input type="checkbox"/>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<input type="checkbox"/>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<input type="checkbox"/>	

#### NFPA CODES

