

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME: THERMALCOTE I**

GENERAL USE: Heat transfer compound

PRODUCT DESCRIPTION: White paste, mild characteristic odor



**MANUFACTURER'S NAME**

Aavid Thermalloy, LLC.

DATE PREPARED: December 18, 2001

SUPERSEDES: July 24, 2001

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**ADDRESS (NUMBER, STREET, P.O. BOX)**

80 Commercial St.

**TELEPHONE NUMBER FOR INFORMATION**

(603) 527-2292

(CITY, STATE AND ZIP CODE)

COUNTRY

**EMERGENCY TELEPHONE NUMBER**

Concord, NH 03301

USA

CHEM • TEL (800) 255-3924 Outside USA (813) 248-0585

**DISTRIBUTOR'S NAME**

Same

**ADDRESS (NUMBER, STREET, P.O. BOX)**

**TELEPHONE NUMBER FOR INFORMATION**

(CITY, STATE AND ZIP CODE)

COUNTRY

**EMERGENCY TELEPHONE NUMBER**

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	%	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PPM	MG/M <sup>3</sup>	PPM	MG/M <sup>3</sup>		
Polydimethylsiloxane (b)	63148-62-9	30 - 60	not established					
Zinc oxide (as zinc) (a)	1314-13-2	30 - 60		15		10	Yes	

(a) See Section 15

(b) This product is not considered a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200). However, certain regulatory agencies, government agencies or states may require the listing of this product or the product is listed only for information.

## SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

White paste, ingestion may cause gastric distress. Exposing product to extreme heat (> 400° F, 204° C) may generate irritating fume.

**POTENTIAL HEALTH EFFECTS**

**INHALATION:** None expected, however, certain individuals may experience minor nausea or headaches. Breathing mists or fume may cause irritation to respiratory tract.

**SKIN:** None expected, however, prolonged contact may cause irritation.

**EYES:** Contact with eyes may cause irritation.

**INGESTION:** May cause gastric distress, vomiting and diarrhea.

CARCINOGENICITY

NTP?

No

IARC MONOGRAPHS?

No

OSHA REGULATED?

No

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## SECTION 4 - FIRST AID MEASURES

**INHALATION:** Remove affected person to fresh air; if symptoms persist seek medical attention.

**SKIN:** Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

**EYES:** Remove contact lenses. Flush eyes with water for 15 minutes; if irritation persists, seek medical attention.

**INGESTION:** Give two glasses of water for dilution; DO NOT induce vomiting; never give anything by mouth to an unconscious person; seek medical attention.

## SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED) 610° F (321° C) Cleveland open cup ASTM-D-92	FLAMMABLE LIMITS LEL: Not applicable	UEL: Not applicable
	AUTOIGNITION TEMPERATURE: Not determined	NFPA CLASS: <b>IIIB</b>

**GENERAL HAZARDS:** Product will support combustion. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

**EXTINGUISHING MEDIA**  
Carbon dioxide, water fog, dry chemical, chemical foam

**FIRE FIGHTING PROCEDURES**  
Firefighters must wear full facepiece self - contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire - exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**  
Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as product may reignite on water surface. Caution - Material will support combustion!

**HAZARDOUS COMBUSTION PRODUCTS**  
Smoke, fumes, oxides of carbon, zinc and silicone.

## SECTION 6 - ENVIRONMENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** WILL SUPPORT COMBUSTION. Evacuate and ventilate area; confine and absorb into absorbent; place material into approved containers for disposal; refer to SARA Title III, Section 313 40 CFR 372 for details concerning reporting requirements.

## SECTION 7 - HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures, open flames. CAUTION - This material will support combustion. Keep this and other chemicals out of reach of children.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS

The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment. See Section 2 for Component Exposure Guidelines.

### PERSONAL PROTECTION:

**RESPIRATORY PROTECTION (SPECIFY TYPE):** NIOSH approved respirator designed to remove airborne mists or fume present in excess of maximum allowable concentrations if user operations generate a mist or fume. Refer to 29 CFR 1910.134 or European Standard EN 149 for regulations.

**PROTECTIVE GLOVES:** Recommended for general protection

**EYE PROTECTION:** Recommended for general protection

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Safety eyebath nearby

**WORK / HYGIENIC PRACTICES:** Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

VAPOR PRESSURE (MM Hg) 0.12 mm Hg @ 100° C	VAPOR DENSITY (AIR = 1) Not determined
SPECIFIC GRAVITY (WATER = 1) 1.600	EVAPORATION RATE (WATER = 1) Not determined
SOLUBILITY IN WATER Negligible	FREEZING POINT Not determined
pH Not determined	APPEARANCE AND ODOR White paste, mild characteristic odor
BOILING POINT > 500° F (> 260° C)	PHYSICAL STATE Paste
VISCOSITY Not determined	VOLATILE ORGANIC COMPOUNDS (Total VOC's) None

**SECTION 10 - STABILITY AND REACTIVITY**

STABILITY UNSTABLE: STABLE: XXX	CONDITIONS TO AVOID: Extreme temperatures > 400° F (204° C), open flames
INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, zinc and silicone, hydrocarbons, fumes, and smoke may be produced.	
HAZARDOUS POLYMERIZATION MAY OCCUR: WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Hazardous Ingredients	%	CAS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Polydimethylsiloxane (b)	30 - 60	63148-62-9	Not established	Not established
Zinc oxide (as zinc) (a)	30 - 60	1314-13-2	7950 mg / kg Oral - mouse	2500 mg / m3 Inhalation - mouse

**SECTION 12 - ECOLOGICAL INFORMATION**

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. This product may produce concentrated hazardous vapors or fumes in a disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations for ignitable materials. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

**SECTION 14 - TRANSPORT INFORMATION**

PROPER SHIPPING NAME: Not Regulated

HAZARD CLASS / Pack Group: None / None  
REFERENCE: Not Applicable  
IDENTIFICATION NUMBER: None  
LABEL: None Required

IATA HAZARD CLASS / Pack Group: None  
IMDG HAZARD CLASS: None  
RID/ADR Dangerous Goods Code: None  
Canadian TDG Class / Division: None  
HAZARD SYMBOLS: None

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, Canadian TDG, and United Nations TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

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**SECTION 15 - REGULATORY INFORMATION**

**TSCA (Toxic substance Control Act)**

Components of this product are listed on the TSCA Inventory.

**SARA TITLE III (Superfund Amendments and Reauthorization Act)**

311/312 Hazard Categories  
None

313 Reportable Ingredients:

(a) A "Yes" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

**CERCLA (Comprehensive Response Compensation and Liability Act)**

None

**CPR (Canadian Controlled Products Regulations)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations

**IDL (Canadian Ingredient Disclosure List)**

Components of this product listed on the Canadian Ingredient Disclosure List are shown in Section 2.

**EINECS (European Inventory of Existing Commercial Chemical Substances)**

Components of this product are on the European Inventory of Existing Commercial Chemical Substances

**EC Risk Phrases**

**EC Safety Phrases**

S2 Keep out of the reach of children.

**CALIFORNIA PROP 65**

The following ingredients are present in this product at less than 0.05% and known to the state of California to cause cancer: Lead and Cadmium.

The following ingredients are present in this product at less than 0.05% and known to the state of California to cause reproductive toxicity: Lead and Cadmium.

**SECTION 16 - OTHER INFORMATION**

No specific notes.

**HMIS HAZARD RATINGS**

HEALTH	0	0 = INSIGNIFICANT	3 = HIGH
FLAMMABILITY	0	1 = SLIGHT	4 = EXTREME
REACTIVITY	0	2 = MODERATE	

PERSONAL PROTECTIVE EQUIPMENT    A    Safety Glasses

**REVISION SUMMARY:**

This MSDS has been revised in the following sections:  
Section 16, addition of California Prop 65 information.

MSDS Prepared by: Chem-Tel, Inc.  
1305 N. Florida Ave.  
Tampa, Florida USA 33602  
(800) 255-3924    Outside USA (813) 248-0573

The information contained herein is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.