

Section 1: Identification

Product Identifier

- **Trade Name:** Thermalcote I
- **Other means of identification:** 249G, 250G, 251G, 252G, 253G

Recommended use and restriction on use

- **Recommended Use:** Heat transfer fluid
- **Restriction on use:** No relevant information available

Details of the Supplier of the Safety Data Sheet

- **Manufacturer/Supplier:**
Aavid, Thermal Division of Boyd Corporation
1 Aavid Circle
Laconia, NH 03246
USA
(603)528-3400
customerservice@boydcorp.com
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

Section 2: Hazards Identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

- GHS label elements Not regulated.
- Hazard pictograms: Not regulated.
- Signal word: Not regulated.
- Hazard statements: Not regulated.

Other hazards There are no other hazards not otherwise classified that have been identified.

Section 3: Composition/Information on Ingredients

Chemical characterization: Mixtures

Components:		
1314-13-2	Zinc Oxide	25-50%
	Polysiloxane	50-75%

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
For the wording of the listed Hazard Statements, refer to section 16.

Section 4: First-aid Measures

Description of First Aid Measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally, the product does not irritate the skin. Immediately wash with water and soap and rinse thoroughly. If skin irritation is experienced, consult a doctor.

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- **After eye contact:** Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After eye contact:** Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After Swallowing:** Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:** Gastric or intestinal disorders.
- **Indication of any immediate medical attention and special treatment needed:** No relevant information available.

Section 5: Fire-Fighting Measures

Extinguishing Media

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture:** No relevant information available.

Advice for firefighters

Protective Equipment: No special measures required.

Additional Information: Cool endangered receptacles with water spray.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up Pick up mechanically.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7: Handling and Storage

Handling

Precautions for safe handling: Avoid contact with eyes.

Conditions for safe storage, including any incompatibles

Requirements to be met by storeroom and receptacles: Store in cool, dry conditions in well sealed receptacles.

Information about storage in one common storage facility: Store away from oxidizing agents. Do not store together with acids.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Components with limit values that require monitoring at the workplace:	
1314-13-2 Zinc oxide	
PEL (USA)	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction and fume
REL (USA)	Short-term value: 10** mg/m ³ Long-term value: 5 mg/m ³ Ceiling limit value: 15* mg/m ³ *dust only **fume
TLV (USA)	Short-term value: 10* mg/m ³ Long-term value: 2* mg/m ³ *as respirable fraction
EL (Canada)	Short-term value: 10 mg/m ³ Long-term value: 2 mg/m ³ respirable
EV (Canada)	Short-term value: 10 mg/m ³ Long-term value: 2 mg/m ³ respirable
LMPE (Mexico)	Short-term value: 10* mg/m ³ Long-term value: 2* mg/m ³ *fracción respirable

Exposure Controls

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Engineering controls: No relevant information available.

Breathing equipment: Use suitable respiratory protective device when high concentrations are present.

Protection of hands:

Gloves are advised for repeated or prolonged contact.

Wear protective gloves to handle contents of damaged or leaking units.

The glove material must be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves: Butyl rubber, BR

Eye protection: Follow relevant national guidelines concerning the use of protective eyewear.

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment: Avoid release to the environment.

Risk management measures: No relevant information available.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	
Form:	Pasty
Color:	White

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Odor	Characteristic
Odor threshold	Not determined
pH-value:	Not applicable
Melting point/Melting range	Not determined
Boiling point/Boiling range	> 260 °C (>500 °F)
Flash point:	321 °C (609.8 °F)
Flammability (solid, gaseous):	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard
Explosion limits	
Lower:	Not determined
Upper:	Not determined
Oxidizing properties:	Non-oxidizing
Vapor pressure:	Not applicable
Density:	
Relative density at 20°C (68 °F):	1.6
Vapor density:	Not applicable
Evaporation rate:	Not applicable
Solubility in / Miscibility with Water:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Viscosity	
Dynamic:	Not applicable
Kinematic:	Not applicable
Other information:	No relevant information available

Section 10: Stability and Reactivity

Reactivity: No relevant information available.

Chemical stability:

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: Reacts with strong acids and oxidizing agents. Toxic fumes may be released if heated above the decomposition point.

Conditions to avoid: No relevant information available.

Incompatible materials: No relevant information available.

Hazardous decomposition:

Under fire conditions only:

Carbon monoxide and carbon dioxide

Hydrocarbons

Toxic metal compounds

Section 11: Toxicology Information

Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values that are relevant for classification		
1314-13-2 Zinc oxide		
Oral	LD50	>5000 mg/kg (rat)

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Primary irritant effect:

On the skin: Based on available data, the classification criteria are not met.

On the eye: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer:	None of the ingredients are listed.
NTP (National Toxicology Program:	None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration	None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion
Inhalation
Eye contact
Skin contact

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Section 12: Ecological Information

Toxicity

Aquatic toxicity: This material is harmful to the environment.

Persistence and degradability: No relevant information available.

Bioaccumulate potential: No relevant information available.

Mobility in soil: No relevant information available.

Ecotoxicological effects:

Remark: Very toxic for fish

Additional ecological information

General notes: Do not allow raw product to reach groundwater, water course or sewage system.

Very toxic for aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential, prolonged term damage of the environment cannot be excluded.

Other adverse effects: No relevant information available.

Section 13: Disposal Considerations

Waste treatment methods



Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all relevant local, state, and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.

Section 14: Transportation Information

UN Number	
DOT, ADR/RID/ADN, IMDG, IATA	UN3077
Propper shipping name	
DOT:	Environmentally hazardous substance, solid, n.o.s (zinc oxide)
ADR/RID/ADN/IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (zinc oxide)
IATA:	Environmentally hazardous substance, solid, n.o.s (zinc oxide)
Transport hazard class(es)	
DOT, IMDG, IATA  Class Label 9 9	
ADR/RID/ADN  Class Label 9 (M7) 9	
Packing group	
DOT, ADR/RID/AND, IMDG, IATA	III
Environmental hazards	
Marine pollutant:	Yes (DOT) Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substance and articles
Danger code (Kemler):	90
EMS Number:	F-A,S-F
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	Not applicable
Transport/Additional information:	Not regulated when carried in single or combination packaging containing a net quantity of 5 L or less for liquids or 5 kg or less for solids per the following: ADR: SP 375 IMDG: 2.10.2.7 IATA: Special provision A197

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DOT Remarks:	Transport labeling is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.
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Section 15: Regulatory Information

Safety, health, and environmental regulations/legislation specific for the substance or mixture

United States (USA)	
SARA Section 302: Section 355: Section 313:	None of the ingredients are listed. None of the ingredients are listed. None of the ingredients are listed.
TSCA (Toxic Substance Control Act)	All ingredients are listed or exempt.
Proposition 65 (California) Chemicals known to cause cancer: Chemicals known to cause developmental toxicity for females: Chemicals known to cause developmental toxicity for males: Chemicals known to cause developmental toxicity:	None of the ingredients are listed. None of the ingredients are listed. None of the ingredients are listed. None of the ingredients are listed.
EPA (Environmental Protection Agency): 1314-13-2 Zinc oxide	II
IARC (International Agency for Research on Cancer):	None of the ingredients are listed.
Canadian Domestic Substances List (DSL):	All ingredients are listed or exempt.

Section 16: Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

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Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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