

**Safety Data Sheet**  
according to 1907/2006/EC


Printing date: 26 July 2018

Revision: 26 July 2018

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name:** Thermalcote I
- **Other means of identification:** No other identifiers
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture:** Heat transfer fluid
- **Uses advised against:** No further relevant information available.
- **1.3 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) 224-9988
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924 (North America)  
+1 (813)248-0585 (International)  
  
United Kingdom  
0845 46 47 (England and Wales)  
08454 24 24 24 (Scotland)  
0808 808 8000 (Northern Ireland)  
(24 hours)

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Aquatic Acute 1 H400 Very toxic to aquatic life.  
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**  
  
GHS09
- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Zinc oxide
- **Hazard statements**  
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**

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P273 Avoid release to the environment.  
P391 Collect spillage.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.2 Mixtures**

· **Components:**

CAS: 1314-13-2	Zinc oxide	40-60%
EINECS: 215-222-5	⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
Index number: 030-013-00-7		
Reg.nr.: 01-2119463881-32-XXXX		

- **Additional information:** For the wording of the listed Hazard Statements refer to section 16.

**SECTION 4: First aid measures**

· **4.1 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.

· **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; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

Gastric or intestinal disorders.

· **Hazards:** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures**

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** None.

· **5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

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- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information:** Cool endangered receptacles with water spray.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation
- **6.2 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.
- **6.3 Methods and material for containment and cleaning up** Pick up mechanically.
- **6.4 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**

- **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**  
Store away from oxidising agents.  
Do not store together with acids.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**1314-13-2 Zinc oxide**

OEL (Ireland)	Short-term value: 10 mg/m <sup>3</sup> Long-term value: 2* mg/m <sup>3</sup> *respirable fraction
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- **8.2 Exposure controls**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:**  
Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**  
Gloves are advised for repeated or prolonged contact.

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- Wear protective gloves to handle contents of damaged or leaking units.
- The glove material has to 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 further relevant information available.

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **Appearance**

- |                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Pasty           |
| · <b>Colour:</b>          | White           |
| · <b>Odour:</b>           | Characteristic  |
| · <b>Odour threshold:</b> | Not determined. |

- |   |                 |
|---|-----------------|
| · <b>pH-value:</b>                                | Not applicable. |
| · <b>Melting point/freezing point:</b>            | Not determined. |
| · <b>Initial boiling point and boiling range:</b> | > 260 °C        |

- |                       |        |
|-----------------------|--------|
| · <b>Flash point:</b> | 321 °C |
|-----------------------|--------|

- |                                     |                 |
|-------------------------------------|-----------------|
| · <b>Flammability (solid, gas):</b> | Not determined. |
|-------------------------------------|-----------------|

- |                                     |                 |
|-------------------------------------|-----------------|
| · <b>Decomposition temperature:</b> | Not determined. |
|-------------------------------------|-----------------|

- |                                |   |
|--------------------------------|---|
| · <b>Explosive properties:</b> | Product does not present an explosion hazard. |
|--------------------------------|---|

· **Explosion limits**

- |                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

- |                           |                 |
|---------------------------|-----------------|
| · <b>Vapour pressure:</b> | Not applicable. |
|---------------------------|-----------------|

· **Density:**

- |                                     |                 |
|-------------------------------------|-----------------|
| · <b>Relative density at 20 °C:</b> | 1,6             |
| · <b>Vapour density:</b>            | Not applicable. |
| · <b>Evaporation rate:</b>          | Not applicable. |

- |  |            |
|--|------------|
| · <b>Solubility in / Miscibility with water:</b> | Insoluble. |
|--|------------|

- |  |                 |
|--|-----------------|
| · <b>Partition coefficient: n-octanol/water:</b> | Not determined. |
|--|-----------------|

· **Viscosity**

- |                     |                 |
|---------------------|-----------------|
| · <b>Dynamic:</b>   | Not applicable. |
| · <b>Kinematic:</b> | Not applicable. |

- |                                |  |
|--------------------------------|--|
| · <b>9.2 Other information</b> | No further relevant information available. |
|--------------------------------|--|

### SECTION 10: Stability and reactivity

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- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with strong acids and oxidising agents.  
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products**  
Under fire conditions only:  
Carbon monoxide and carbon dioxide  
Hydrocarbons  
Toxic metal compounds

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**
- **1314-13-2 Zinc oxide**
- Oral | LD50 | > 5000 mg/kg (rat)
- **Primary irritant effect**
- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
- **IARC (International Agency for Research on Cancer):**
- None of the ingredients are listed.
- **Probable routes of exposure:**  
Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** No further relevant information available.
- **Repeated dose toxicity:** No further relevant information available.
- **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**

- **12.1 Toxicity**

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- **Aquatic toxicity:** The material is harmful to the environment.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**  
Do not allow product to reach ground water, 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 can not be excluded.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed 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 packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- **14.1 UN-Number**
- **DOT, ADR, IMDG, IATA** UN3077
- **14.2 UN proper shipping name**
- **DOT** Environmentally hazardous substances, solid, n.o.s. (zinc oxide)
- **ADR, IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
- **IATA** Environmentally hazardous substance, solid, n.o.s. (zinc oxide)
- **14.3 Transport hazard class(es)**

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· **DOT, IMDG, IATA**



· **Class** 9  
· **Label** 9

· **ADR**



· **Class** 9 (M7)  
· **Label** 9

· **14.4 Packing group**  
· **DOT, ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**  
· **Marine pollutant:** Yes  
Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Miscellaneous dangerous substances and articles.  
· **Danger code (Kemler):** 90  
· **EMS Number:** F-A,S-F

· **14.7 Transport in bulk according to Annex II of Marpol 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

· **DOT** 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.

**SECTION 15: Regulatory information**

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

· **IARC (International Agency for Research on Cancer)**

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None of the ingredients are listed.

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients are listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**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.

· **Relevant phrases**

- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

· **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
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bio-accumulable, Toxic
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

· **Sources**

- Website, European Chemicals Agency (echa.europa.eu)
- Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
- 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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