1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Thermofluid Technologies, Inc.
3031 Topside Business Park Drive
Louisville, TN 37777 USA

Revised: 06/03/2013
Prepared by Missy Simpson
CHEMTREC 1-800-424-9300 or 1-703-527-3887
MSDS Contact 1-865-983-1633
Information info@redtek.com

USES: Lubricating Grease

Formula: HX-10

HMIS
Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: B

NFPA
Health: 1 Flammability: 1 Reactivity: 0 Special: NA

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
This product may cause irritation of the eyes, skin, mucous membranes and respiratory tract. May be harmful if swallowed.

SIGNAL WORD
CAUTION

PRINCIPLE ROUTES OF EXPOSURE
Eyes, skin, and inhalation.

EYE CONTACT
Contact with eyes may cause irritation.

SKIN CONTACT
Repeated or prolonged contact with base product may cause irritation leading to various skin disorders such as dermatitis, oil acne, or folliculitis.

INHALATION
Inhalation of vapor (generated at high temperatures only) or oil mist from this product may cause mild irritation of the upper respiratory tract.
INGESTION
Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

PHYSICO-CHEMICAL PROPERTIES:
No hazards resulting from material as supplied.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS No.</th>
<th>WEIGHT %</th>
<th>OSHA CEILING LIMITS</th>
<th>OSHA TWA (final)</th>
<th>ACGIH CEILING LIMITS</th>
<th>ACGIH EXPOSURE LIMITS</th>
<th>VENDOR EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>8012-95-1</td>
<td>80-90%</td>
<td></td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
<td>68511-50-2</td>
<td>1-5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*May include one or more of the following CAS #: 64741-88-4, 64741-89-5, 64741-44-2, 64741-96-4, 64741-97-5, 64742-46-7, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-62-7, 64742-65-0, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 69029-75-0, 64742-01-4, and 64741-95-3

4. FIRST AID MEASURES

GENERAL ADVICE
Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician.

EYE CONTACT
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

SKIN CONTACT
Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off immediately with plenty of water for at least 15 minutes.

INHALATION
Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician if necessary.

INGESTION
If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN
Treat symptomatically.

MEDICAL CONDITION AGGRAVATED BY EXPOSURE
Dermatitis.
5. FIRE-FIGHTING MEASURES

Flash Point (°C): 240  Flash Point (°F): 464  Flash Point Method: COC

FLAMMABLE LIMITS IN AIR – LOWER (%)
Not determined.

FLAMMABLE LIMITS IN AIR – UPPER (%)
Not determined.

SUITABLE EXTINGUISHING MEDIA
Use dry chemical, CO2, water spray or ‘alcohol’ foam.

SPECIFIC HAZARDS
Do not allow material to contaminate ground water system.

UNUSUAL HAZARDS
None known.

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

SPECIFIC METHODS
Water mist may be used to cool closed containers.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not breathe vapor/dust. Use personal protective equipment. Wash thoroughly after handling.

ENVIRONMENTAL PRECAUTIONS
Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

METHODS FOR CLEANING UP
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

HANDLING

TECHNICAL MEASURES/PRECAUTIONS
Provide sufficient air exchange and/or exhaust in work rooms.

SAFE HANDLING ADVICE
In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe vapors or spray mist. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.
STORAGE

TECHNICAL MEASURES/STORAGE CONDITIONS
Store at room temperature in the original container.

INCOMPATIBLE PRODUCTS
Strong oxidizing agents.

SAFE STORAGE TEMPERATURE
5 – 35 °C

SHELF LIFE
2 years

8. EXPOSURE CONTROL/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>OSHA CEILING LIMITS</th>
<th>OSHA TWA (final)</th>
<th>ACGIH CEILING LIMITS</th>
<th>ACGIH EXPOSURE LIMITS</th>
<th>NIOSH – POCKET GUIDE</th>
<th>VENDOR EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>None</td>
<td>5 mg/m³</td>
<td>None</td>
<td>5 mg/m³</td>
<td>5 mg/m³</td>
<td>None</td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

ENGINEERING MEASURES
Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

GENERAL
Eye Wash and Safety Shower.

RESPIRATORY PROTECTION
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a
NIOSH-certified respirator with organic vapor/P100 filter should be worn.

EYE PROTECTION
Safety glasses with side-shields.

HAND PROTECTION
Recommended: neoprene, latex, nitrile, butyl rubber and polyethylene type.

SKIN AND BODY PROTECTION
Long sleeved clothing.

HYGIENE MEASURES
Avoid contact with sin, eyes and clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Semi-solid
COLOR: Opaque Red
ODOR: Characteristic
VAPOR DENSITY: Not determined
VAPOR PRESSURE (kPa): Not determined
SOLUBILITY IN WATER: Insoluble
EVAPORATION RATE: Not determined
pH: Not applicable
FLASH POINT (°C): 240
FLASH POINT (°F): 464
DECOMPOSITION TEMPERATURE (°C): Not determined
AUTO-IGNITION TEMPERATURE (°C): Not determined
DENSITY @ 25 °C (g/cc): 0.91
BULK DENSITY @ 77 °F (lb/gal): 7.5
PARTITION COEFFICIENT (n-octanol/water): Not determined
EXPLOSIVE LIMITS
  UPPER LIMIT: No data available
  LOWER LIMIT: No data available

10. STABILITY AND REACTIVITY

STABILITY
  Stable under recommended storage conditions.

CONDITIONS TO AVOID
  None known.

MATERIALS TO AVOID
  Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
  Carbon oxides, Sulphur oxides, Nitrogen oxides (nox), Smoke.

HAZARDOUS POLYMERIZATION
  Not applicable.

11. TOXICOLOGICAL INFORMATION

MINERAL OIL INFORMATION
  Any product containing a substance for which OSHA has established a permissible exposure limit (PEL) is considered hazardous. OSHA has established a PEL of 5 mg/m³ for worker exposure to air borne mists of mineral oils. Therefore, the presence of mineral oils brings this product within the provisions of the OSHA Hazard Communication Standard where the
PEL reaches or exceeds 5 mg/m³. Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

No toxicological information is available on the product. Data obtained on components are summarized below.

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>IARC CARCINOGENS</th>
<th>NTP</th>
<th>OSHA – Select Carcinogens</th>
<th>ACUTE TOXICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not listed as carcinogenic or possibly</td>
<td>Not listed as known or reasonably</td>
<td>Not listed as a select</td>
<td>Mouse Oral LD50 = 22</td>
</tr>
<tr>
<td></td>
<td>carcinogenic to humans</td>
<td>anticipated to be a human carcinogen</td>
<td>carcinogen</td>
<td>g/kg</td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
<td>Not listed as carcinogenic or possibly</td>
<td>Not listed as known or reasonably</td>
<td>Not listed as a select</td>
<td>Rat Oral LD50 = 5000</td>
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<tr>
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<td>carcinogenic to humans</td>
<td>anticipated to be a human carcinogen</td>
<td>carcinogen</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

**12. ECOLOGICAL INFORMATION**

**PERSISTANCE AND DEGRADABILITY**
No information available

**MOBILITY**
No data available

**BIOACCUMULATION**
Not available

**ECOTOXICITY EFFECTS**
No data available

**AQUATIC TOXICITY**
Not determined

**COMPONENT INFORMATION:**

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>ECOTOXICITY – Fish Species Data</th>
<th>ECOTOXICITY – Freshwater Algae Data</th>
<th>ECOTOXICITY – Water Flea Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
<td>250 999</td>
<td>&gt;1000 mg/L</td>
<td>EC50 (Daphnia magna – 48h) = 1000 mg/L</td>
</tr>
</tbody>
</table>

**13. DISPOSAL CONSIDERATIONS**

**WASTE FROM RESIDUES/UNUSED PRODUCTS**
Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.
CONTAMINATED PACKAGING
Do not re-use empty containers.

METHODS FOR CLEANING UP
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME Not Regulated

TDG (CANADA)
PROPER SHIPPING NAME Not Regulated

IMDG/IMO
PROPER SHIPPING NAME Not Regulated

IATA/ICAO
PROPER SHIPPING NAME Not Regulated

15. REGULATORY INFORMATION

CANADAIAN REGULATIONS

CANADA – WHMIS CLASSIFICATION INFORMATION
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.

CANADIAN PRODUCT CLASSIFICATION
None Required

COMPONENT CLASSIFICATION DATA

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>WHMIS HAZARD CLASS</th>
<th>CEPA SCHEDULE I</th>
<th>CHALLENGE SUBSTANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>1% Uncontrolled product according to WHMIS classification criteria.</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
<td>None</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>
U.S. FEDERAL REGULATIONS
OSHA HAZARD COMMUNICATION STANDARD
    This product is considered to be hazardous under the OSHA Hazard Communication Standard.

CERCLA/SARA INFORMATION
SARA (311, 312) HAZARD CLASS : This product possesses the following SARA Hazard Categories
    IMMEDIATE HEALTH (ACUTE) : Yes
    DELAYED HEALTH (CHRONIC) : No
    FLAMMABILITY : No
    PRESSURE : No
    REACTIVITY : No

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>HAZARDOUS SUBSTANCES AND RQs</th>
<th>EXTREMELY HAZARDOUS SUBSTANCES AND TPQs</th>
<th>SARA 313 EMISSION REPORTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA 313 EMISSION REPORTING
    This product contains no components subject to the reporting requirements of SARA 313

CLEAN AIR AND CLEAN WATER ACTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>HAZARDOUS AIR POLLUTANTS</th>
<th>CWA – HAZARDOUS SUBSTANCES</th>
<th>CWA – TOXIC POLLUTANTS</th>
<th>CWA – PRIMARY POLLUTANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
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<tr>
<td>Sulfurized isobutylene</td>
<td>Not listed</td>
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</tr>
</tbody>
</table>

RCRA STATUS
    Not regulated

U.S. STATE REGULATIONS (RTK):

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CALIFORNIA PROPOSITION 65</th>
<th>PARTK</th>
<th>MI CRITICAL MATERIALS</th>
<th>NJRTK</th>
<th>MARTK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not listed</td>
<td>Present</td>
<td>Not Listed</td>
<td>1437</td>
<td>Present</td>
</tr>
<tr>
<td>Sulfurized isobutylene</td>
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<td>Not listed</td>
<td>Not Listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65 STATUS
    May contain trace amounts of listed chemicals: naphthalene.
INVENTORY STATUS
UNITED STATES TSCA – SECT. 8(b) INVENTORY
This product complies with TSCA
CANADA DSL/NDSL INVENTORY LIST
This product complies with DSL

16. OTHER INFORMATION

SOURCES OF KEY DATA USED TO COMPILE THE DATA SHEET
Material safety data sheets of the ingredients.

HMIS CLASSIFICATION
Health: 1  Flammability: 1  Reactivity: 0  Personal Protection: B

HMIS USE DILUTION
Health: --  Flammability: --  Reactivity: --  Personal Protection: --

NFPA RATING
Health: 1  Flammability: 1  Reactivity: 0  Special: NA

* Indicates possible chronic health effect.

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

REFERENCES:
RESPONSIBLE NAME:  PRODUCT SAFETY – Missy Simpson
FOR COPY OF (M)SDS:  Internet: www.redtek.com  Phone: 1-865-983-1633

DISCLAIMER
This product’s safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user’s obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. Thermofluid Technologies, Inc. assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of Thermofluid Technologies, Inc.

End of Safety Data Sheet