

# SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**COMMERCIAL NAME:** Kresco High-Temperature Thermic Oil (ISO 32, 46, 68 and 100)

**Product Number(s):** OIL-0004-HT, OIL-0010-HT, OIL-0020-HT and OIL-0205-HT

**Product Use:** Heat Transfer Fluid

### Company Identification

Kresco Solutions Inc.  
1404 Av. de la Gare  
Mascouche, QC J7K 0N  
Canada

**In case of emergency, please contact Kresco Solutions inc.**

**Tel:** 450-824-7737 or 877-757-3726

### Product Information

Product Information: 450-824-7737

MSDS: 450-824-7737

## SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or the Mixture

**GHS Rating(s):** No Classified Hazards

**Signal Word:** Not Applicable

2.2 Label Elements: No Classified Hazards.



### SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15- C50)	Mixture	70 - 99 % weight

Information on ingredients that are considered Controlled Products and/or that appear on the WHMIS Ingredient Disclosure List (IDL) is provided as required by the Canadian Hazardous Products Act (HPA, Sections 13 and 14). Ingredients considered hazardous under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, are also listed. See Section 15 for additional regulatory information.

### SECTION 4 - FIRST AID MEASURES

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

### IMMEDIATE HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

## **SECTION 5 - FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

### **PROTECTION OF FIRE FIGHTERS:**

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities as appropriate or required.

## SECTION 7 - HANDLING AND STORAGE

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use in a well-ventilated area.

## PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Neoprene, Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

### Occupational Exposure Limits:

COMPONENTS	COUNTRY/ AGENCY	TWA	STEL	CEILING	NOTATION
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	-	-

**NOTE ON OCCUPATIONAL EXPOSURE LIMITS:** Consult local authorities for acceptable provincial values in Canada. Consult the Canadian Standards Association Standard Z94.4-2011 Selection, Use and Care of Respirators.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Attention:** the data below are typical values and do not constitute a specification.

**Color:** Clear to yellow

**Physical State:** Liquid

**Odor:** Slight Hydrocarbon odor

**pH:** Not Applicable

**Vapor Pressure:** <0.01 mmHg @ 37.8 °C (100 °F)

**Vapor Density (Air = 1):** >1

**Boiling Point:** > 260°C (500°F)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** No Data Available

**Melting Point:** No Data Available

**Specific Gravity:** <1 kg/l

**Density:** 0,860 - 0,895 kg/l @ 15°C (59°F)

**Viscosity:** 30 cSt - 100 cSt @ 40°C (104°F)

**Evaporation Rate:** No Data Available

**Odor Threshold:** No Data Available

**Coefficient of Water/Oil Distribution:** No Data Available

### FLAMMABLE PROPERTIES:

**Flashpoint:** (Cleveland Open Cup) > 200 °C (> 392 °F)

**Autoignition:** > 320 °C (> 608 °F)

**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Available  
Upper: Not Available

## SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

**Sensitivity to Mechanical Impact:** No

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Information on toxicological effects

**General information:** Based on data on the components and the toxicology of similar materials.

**Route of entry:** Skin, Eyes, Ingestion, and Inhalation.

### ACUTE EXPOSURE:

**Eye irritation:** Not expected to cause eye irritation. Based on data from components or similar materials. Vapors may cause irritation.

**Skin irritation:** Slightly irritating based on data from components or similar materials. Prolonged or repeated skin contact without proper hygiene may result in skin disorders such as acne.

**Respiratory irritation:** Based on data from components and similar materials, Inhalation of vapors or mists may cause irritation.

**Dermal toxicity:** Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit

**Oral toxicity:** Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat

**Inhalation toxicity:** Based on data from components and similar materials, product is not considered to be an inhalation hazard under normal conditions of use.

**Sensibilisation:** Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components or similar formulations.

#### **CHRONIC EXPOSURE:**

**Chronic toxicity:** No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Carcinogenicity:** Product contains mineral and/or synthetic oils shown to be noncarcinogenic in laboratory studies with the same or similar materials. Mineral and synthetic oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.

**Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Reproductive toxicity:** No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

**Teratogenicity:** No data available to indicate either product or components present at greater than 0.1% that may cause birth defects.

**Specific Target Organ Toxicity - Single Exposure:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure:** No data available.

#### **ADDITIONAL TOXICOLOGY INFORMATION:**

No other health hazards known.

## SECTION 12 - ECOLOGICAL INFORMATION

### ECOTOXICITY

This material is not expected to be harmful to aquatic organisms. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material.

**MOBILITY:** No data available.

**PERSISTENCE AND DEGRADABILITY:** This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

The product has not been tested. The statement has been derived from the properties of the individual components.

### POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

**Octanol/Water Partition Coefficient:** No data available

## SECTION 13 - DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

## SECTION 14 - TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**TC Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER TDG REGULATIONS

**IMO/IMDG Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**DOT Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

## **SECTION 15 - REGULATORY INFORMATION**

### **REGULATORY LISTS SEARCHED:**

01-1=IARC Group 1  
01-2A=IARC Group 2A  
01-2B=IARC Group 2B  
35=WHMIS IDL

No components of this material were found on the regulatory lists above.

### **CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: DSL (Canada), TSCA (United States).

### **WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

## SECTION 16 - OTHER INFORMATION

### MSDS PREPARATION:

Prepared by Robert Maillette, Chemist

**Date:** June 27, 2016

### REVISION STATEMENT:

**Revised on September 13, 2019**

### ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

<b>TLV</b> - Threshold Limit Value	<b>TWA</b> - Time Weighted Average
<b>STEL</b> - Short-term Exposure Limit	<b>PEL</b> - Permissible Exposure Limit
<b>CAS</b> - Chemical Abstract Service Number	<b>NFPA</b> - National Fire Protection Association (USA)
<b>ACGIH</b> - American Conference of Government Industrial Hygienists	<b>IMO/IMDG</b> - International Maritime Dangerous Goods Code
<b>API</b> - American Petroleum Institute	<b>MSDS</b> - Material Safety Data Sheet
<b>DOT</b> - Department of Transportation (USA)	<b>NTP</b> - National Toxicology Program (USA)
<b>IARC</b> - International Agency for Research on Cancer	<b>OSHA</b> - Occupational Safety and Health Administration

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.