



MSDS FOR HIGH TEMPERATURE HEAT TRANSFER OIL

SECTION I : PRODUCTION & COMPANY IDENTIFICATION

TRADE NAME : ISTPURE HIGH TEMPERATURE HEAT TRANSFER OIL

PART # : 330171, 330172, 330173, 330174

CHEMICAL NAME AND SYNONYMS : Mixture

MANUFACTURER/SUPPLIER'S NAME:



International
Surface
Technologies
istsurface.com

4160 Industriel Blvd.
Laval, QC, H7L 6H1
CANADA
istsurface.com

24 HOURS EMERGENCY :

Call CHEMTREC 1 800 424-9300 or 703 527-3887

PRODUCT USE : It is a heat transfer fluid recommended for non-pressurized, liquid-phase, closed heat transfer systems.

SECTION 2 : HAZARDS IDENTIFICATION

WHMIS CLASS AND DESCRIPTION :



EMERGENCY OVERVIEW	Repeated exposure may cause skin dryness and cracking
ROUTES OF ENTRY	Dermal contact. Eye contact. Inhalation and Ingestion

POTENTIAL ACUTE HEALTH EFFECTS

INHALATION	No acute effect expected as considered non-toxic
CONTACT WITH EYES	This product should not cause eye irritation. Prolonged contact with the product can cause irritation
SKIN CONTACT	This product is practically non-toxic if absorbed through the skin. It may cause a mild irritation through prolonged and repeated contact. The product while hot may cause some burns
INGESTION	Practically non-toxic if ingested. If absorbed in great quantities may cause distress of the digestive system and diarrhea
OTHER EFFECTS	None expected to cause any significant health effect under normal conditions of use. Not MUTAGENIC, GENOTOXIC or SENSITIZING for animals and humans
MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:	Pre-existing disorders involving any target organs mentioned in MSDS as being at risk may be aggravated by the over-exposure to this product.

SEE TOXICOLOGICAL INFORMATION (SECTION 11)



SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

NAME	CAS NUMBER	%
-/-	-/-	-/-

- **Contains no hazardous ingredients as defined by the Canadian Hazardous Products Act (BILL C70) or by OSHA 29 CFR 1910.1200.**
- **Canadian DSL and NDSL status: All ingredients are listed.**
- **No components of this product have been found carcinogenic or potential carcinogen. Does not contain ingredients that are listed as carcinogenic or potential carcinogen by OSHA, IARC or the U.S. National Toxicology Program (NTP). This product or its components have no teratogenic or mutagenic effects known.**

SECTION 4 : FIRST-AID

GENERAL ADVICE	IN CASE OF SERIOUS OR ANY PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY CARE. Show this material safety data sheet to the medical personel in attendance
INHALATION	If exposed to high levels of vapors or suspensions, take the person to fresh air and get medical attention if cough or other symptoms develop
EYE CONTACT	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately
SKIN CONTACT	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminjated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately
INGESTION	This product has a low toxicity. May cause nausea and have a laxative effect. Do not induce vomiting. Contact an Anti-Poison Center (1-800-463-5060)
PROTECTION OF FIRST-AIDERS	Do not use mouth to mouth if the victim has ingested or inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical advice. Use personal protective equipment
NOTES TO PHYSICIAN	Treat symptomatically
24 HOURS EMERGENCY: CALL CHEMTREC 1-800-424-9300 OR 703-527-3887	

SECTION 5 : FIRE-FIGHTING MEASURES

FLASH POINT (COC)	238 °C
AUTOIGNITION TEMPERATURE (°C)	368 °C (estimated)
SUITABLE EXTINGUISHING MEDIA	Foam, Dry chemical and CO ²
HAZARDOUS COMBUSTION PRODUCTS	Normal combustion products, CO and CO ₂ .
SPECIAL FIRE FIGHTING PROCEDURES	Do not enter confined fire space without adequate protective clothing and an approved positive self-contained breathing apparatus. Use water to cool fire exposed containers



SECTION 6 : ACCIDENTAL RELEASE MEASURES




SPILL AND LEAK PROCEDURES	Except in case of small spillages. The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. If required, notify relevant authorities according to all applicable regulations. Evacuate non-essential personnel. For personal protection see section 8. Stop or contain leak at the source, if safe to do so. In case of large spillages, alert occupants in downwind areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area)
ADVICE FOR NON-EMERGENCY PERSONNEL	Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area)
ADVICE FOR EMERGENCY PERSONNEL	Take all appropriate steps to avoid fire, explosion and inhalation hazards to the rescuers including the use of breathing apparatus. In case of small spillages: normal working clothes are usually adequate. Large spillages: Chemical resistant clothing, apron. Work gloves (preferably gauntlets) providing adequate chemical resistance. Remarks: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Work helmet, safety shoes or boots. Goggles and/or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection not normally required in normal conditions. A half or full-face respirator with filter(s) for organic vapors (and when applicable: for H ₂ S would be recommended otherwise. A Self-Contained Breathing Apparatus (SCBA) can be used according to the extent oxygen deficiency is possible
ENVIRONMENTAL PRECAUTIONS	Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. The product should not be allowed to enter drains, water courses or the soil.
METHODS AND MATERIALS FOR CONTAINEMENT AND CLEANING UP	Dam up. Ground and bond containers when transferring material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

SECTION 7 : HANDLING AND STORAGE

STORAGE AND HANDLING	Use appropriate equipment (refer to section 8) whenever manipulating this product. Keep container in a cool and well-ventilated area. Do not enter storage areas and confined spaces unless adequately ventilated. Keep container tightly closed and sealed until ready for use. Store and use away from heat, sparks, open flame or any other ignition source
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SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS	
   <p>MINERAL OIL MIST</p>	<p>OSHA (PEL).....TWA 5 mg/m³ NIOSH (REL)TWA 5 mg/m³ STEL10 mg/m³</p>

VENTILATION	Mechanical ventilation is recommended.
RESPIRATORY PROTECTION	If mist present, chemical cartridge respirator is recommended.
GLOVES	Resistant gloves (Viton, Nitrile, Neoprene) are recommended when handling this material.
EYE PROTECTION	Chemical safety goggles are recommended.
BODY	Flame retardant clothing is required.
OTHER PROTECTION	In confined spaces or where the risk of skin exposure is higher, resistant clothing or apron should be worn. Flame retardant clothing is required. Security boots.

SECTION 9 : PHYSICAL DATA

PHYSICAL STATE AT 25°C	Liquid.
APPEARANCE AND ODOR	Bright with characteristic odor.
pH	Not available.
BOILING POINT	Not available.
FLASH POINT (COC)	238°C
POUR POINT	-15°C
EVAPORATION RATE	Negligible
LOWER FLAMMABILITY LIMITS	Not available.
UPPER FLAMMABILITY LIMITS	Not available.
DENSITY	0,860 (g/cm ³ at 15 °C)
VAPOR PRESSURE	< 0.0001 (mm Hg at 20 °C)
VISCOSITY	51.2 - 7.08 (cSt at 40 °C)
SOLUBILITY IN WATER	Negligible
AUTOIGNITION TEMPERATURE	368 °C (estimated)



SECTION 10 : STABILITY AND REACTIVITY

STABILITY	Stable in normal condition of use and storage.
POSSIBILITY OF HAZARD REACTIONS	Will not occur
CONDITIONS TO AVOID	Avoid excessive heat, open flames and formation of oil mist.
PRODUCTS TO AVOID	Oxidizing agents, strong acids and bases.
HAZARDOUS DECOMPOSITION PRODUCTS	Normal combustion products and CO

SECTION 11 : TOXICOLOGICAL INFORMATION

SPECIES	DL ₅₀ ORAL	DL ₅₀ DERMAL	CL ₅₀ BY INHALATION	HOUR
Rat	> 30 g/kg	> 8000 mg/kg	Not available	-/-

CHRONIC EFFECTS ON HUMANS	Minimally toxic. Negligible hazard at ambient/normal temperature. This product should not be harmful through inhalation. Prolonged exposure to high vapor concentration of this product can cause headache, dizziness and nausea and in the case of hot mist, it can cause an irritation to the respiratory passages
CARCINOGENIC EFFECTS	This product has no carcinogenic effects known
TERATOGENICITY/MUTAGENICITY	This product has no teratogenic or mutagenic effects known
OTHER TOXIC EFFECTS ON HUMANS	Repeated exposure may cause skin dryness and cracking.

SECTION 12 : ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS	Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.
BIODEGRADABILITY	NOT READILY BIODEGRADABLE.
MOBILITY	Soil: Given its physical and chemical characteristics, the product generally shows low soil mobility. Air: Loss by evaporation is limited. Water: Insoluble. The product will spread on the surface of the water.

SECTION 13 : DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS	Consult relevant local authorities. Reclaim or dispose of at a licensed waste disposal company. Incinerate with approval of appropriate local authority.
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SECTION 14 : TRANSPORTATION INFORMATION

TRANSPORTATION IN CANADA (TDG)		Not regulated
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SHIPPING NAME	None
UN NUMBER	
CLASS DESCRIPTION	

Other agencies:

USDOT	Not regulated by that agency as a hazardous material.
IMO/IMDG (SEA)	Not regulated as a hazardous material for maritime transport.
IATA (AIR)	Not regulated as a hazardous material for air transport.
ADNR (INLAND WATERWAY TRANSPORT)	Not regulated by that agency as a hazardous material.
ADR/RID	Not regulated as a hazardous material for land transport.

SECTION 15 : REGULATORY INFORMATION

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

THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.

DSL/NDSL Status: This product, or all components, are listed on the Domestic Substances List, as required under the Canadian Environmental Protection Act. This product and/or all components are listed on the U.S. EPA TSCA Inventory.

Other Regulatory Status: No Canadian federal standard; however, for general discharge guidance, federal installations limited to 15 mg/L

INTERNATIONAL REGULATIONS

U.S. FEDERAL REGULATIONS: TSCA 8(b) inventory: All components are listed.

RISK PHRASES	This product is not classified according to EU legislation
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SARA 302/304/311/312 EXTREMELY HAZARDOUS SUBSTANCES	To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.
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SECTION 15 : REGULATORY INFORMATION (CONT'D)

SARA 302/304 EMERGENCY PLANNING AND NOTIFICATION	To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.
SARA 302/304/311/312 HAZARDOUS CHEMICALS	Distillates (petroleum), hydrotreated light
SARA 311/312 MSDS DISTRIBUTION - CHEMICAL INVENTORY - HAZARD IDENTIFICATION	Distillates (petroleum), hydrotreated light: Delayed (chronic) health hazard
SARA 313	This product contains no chemicals in excess of the applicable minimum concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (Table 372.65).

- **Clean Water Act (CWA) 307:** To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.
- **Clean Water Act (CWA) 311:** To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.
- **Clean Air Act (CAA) 112 accidental release prevention:** To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.
- **Clean Air Act (CAA) 112 regulated flammable substances:** To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.
- **Clean Air Act (CAA) 112 regulated toxic substances:** To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.

STATES REGULATIONS

To the best of our knowledge, there are no substances that would be at reportable levels for this regulation in this product.

California Proposition 65: To the best of our knowledge, there are no Proposition 65 chemicals present in this product at levels that would require warning under the California Safe Drinking Water and Toxic Enforcement Act.

OTHER INTERNATIONAL LISTS

AUSTRALIA INVENTORY (AICS)	This material is listed or exempted
CHINA INVENTORY (IECSC)	
EUROPE (EINECS/ELINCS/NLP)	
JAPAN INVENTORY	Not determined
KOREA INVENTORY (KECL)	This material is listed or exempted
NEW ZEALAND INVENTORY OF CHEMICALS (NZIOC)	
PHILIPPINES INVENTORY (PICCS)	



SECTION 16 : ADDITIONAL INFORMATION

LABEL REQUIREMENTS	None (based on WHMIS)
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Other Hazardous System Classification: According to the **NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)** and **Hazardous Materials Identification System (HMIS, USA)**:

NFPA		HMIS	
0	HEALTH	0	NO SIGNIFICANT RISK
1	FLAMMABILITY	1	PRESENT A WEAK RISK
0	REACTIVITY	0	NO SIGNIFICANT RISK
	INDIVIDUAL PROTECTION	B	Eye protection and gloves are recommended

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