



## SAFETY DATA SHEET

### 1. Product Identification

**TRANSFORMER MINERAL OIL TYPE II**

### 2. Hazard(s) Identification

Physical Hazards	Not classified.
Health hazards	Aspiration hazard
Environmental hazard	Not Classified
OSHA defined hazard	Not Classified
Label element	



**Signal word: Danger**

**Hazard statement: May be fatal if swallowed and enters airways.**

**Prevention: Do not breathe gas/mist/vapors/spray.**

**Response If exposed or concerned: Get medical advice/attention Storage**

**Store in accordance with local/regional/national/international regulation**

**Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulation, and product characteristics at time of disposal. See Section 13 of this SDS for disposal instructions. Hazard(s) not otherwise**

**Classified (HNOC)**

**Supplemental information None**

### 3. Composition/ information on ingredients

**Chemical Name:** Petroleum Hydrocarbon  
**Common Name:** Naphthenic Oil

Components	CAS Number	% Composition
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Distillates, Hydrotreated Light Naphthenic Oxidation Inhibitor	64742-53-6 128-37-0		100%
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#### 4. First Aid Measures

- Inhalation:** If irritation, headache, nausea or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.
- Ingestion:** If swallowed, observe for signs of stomach discomfort or nausea. If symptoms persist, give two glasses of water and get medical attention. Do not induce vomiting.
- Skin:** Wash skin thoroughly with soap and water for several minutes. If skin irritation develops or persists, get medical attention.
- Eyes:** Flush eyes with plenty of water for several minutes. If irritation or redness persists, get medical attention.

#### 5. Fire Fighting Measures

**Flammable Properties:**

Flash Point (Cleveland Open Cup): 146°C (295°F)  
 Auto Ignition Temperature: > 315°C (> 600°F)  
 Lower Explosive Level (LEL): Not Determined  
 Upper Explosive Level (UEL): Not Determined  
 Flammability Classification: OSHA Class III-B Combustible Liquid, 29 CFR 1910.106(a)

**Extinguishing Media:**

Dry chemical, foam, CO2 and water mist or fog. Water may be used to cool below flash point. Do not use forced stream as this could cause fire to spread. Class ABC fire extinguisher

**Combustion Products/ Specific Hazards:**

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

**Fire Fighting/ Instructions and Equipment:**

This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined spaces without proper protective equipment. Firefighting personnel should wear respiratory protection and flame retardant clothing. (positive pressure if available).

**General fire Hazard:**

No unusual fire or explosion hazards noted. Flammability Class: Combustible IIIB

#### 6. Accidental Release Measures

**Spill Management:**

Eliminate all sources of ignition in the area of the spilled material. 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. Use appropriate techniques such as applying non-combustible absorbent materials

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or pumping. Where appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Report spills to local authorities and/or the US Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

## 7. Handling and Storage

### Handling and Storage Precautions:

Product should be stored in a clean dry container at ambient temperature. Product should remain stable for prolonged periods. Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors and may be dangerous. Empty drums should be completely drained, properly bunged and promptly disposed of in an environmentally safe manner and in accordance with all governmental regulations. NFPA Class III-B storage. Wash hands with soap and water before eating, drinking, smoking or use of restrooms. Do not use gasoline, solvents, kerosene or abrasive skin cleaners for washing exposed skin areas. Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

## 8. Exposure Controls and Personal Protection

Components	CAS Number	OSHA		ACGIH	
		TWA	STEL	TWA	STEL
Distillates, Hydrotreated Light Naphthenic	64742-53-6	5mg/m <sup>3</sup>	NA	5mg/m <sup>3</sup>	10mg/m <sup>3</sup>
		(oil mist)		(oil mist)	(oil mist)

### Engineering Controls:

Adequate ventilation is required where excessive heating or agitation may occur to maintain concentration below permissible exposure limits (see above).

### Eye/Face Protection:

Approved eye protection is recommended to safeguard against potential eye contact, irritation or injury. Depending on conditions, a face shield may be necessary.

### Skin Protection:

Workers should wash exposed skin several times daily with soap and water. Contaminated clothing should be laundered at least weekly. Solvent resistant gloves may be worn if needed.

### Respiratory Protection:

Airborne concentrations should be kept to lowest levels. If vapor (oil mist) is generated, use respirator approved by OSHA or NIOSH as appropriate. Positive pressure air-supplying regulator should be used for cleaning large spills or upon entry into tanks, vessels or other confined spaces.

## 9. Physical and Chemical Properties

<b>Appearance state</b>	Liquid.	Clear & bright <b>Physical</b>
<b>Form</b>		Liquid.
<b>Color</b>		Light Amber to Golden
<b>Odor</b>		Mild Petroleum Odor
<b>Odor threshold</b>		Not available. <b>pH</b>
	Not applicable	
<b>Melting point/freezing point</b>		< -45 °F (< -42.78 °C) ASTM D 5949

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<b>Initial boiling point and boiling range</b>		> 435 °F (> 223.89 °C) ASTM D 2887
<b>Flash point</b>		≥ 295.0 °F (≥ 146.1 °C) Cleveland Open Cup ASTM D 92
<b>Evaporation rate</b>		Not available.
<b>Flammability (solid, gas)</b>		Not available.

### Upper/lower flammability explosive limits

<b>Flammability limit - lower (%)</b>	Not determined
<b>Flammability limit - upper (%)</b>	Not determined
<b>Explosive limit – lower %</b>	Not determined
<b>Explosive limits – upper %</b>	Not determined

<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	>5
<b>Relative density</b>	9.4 (20.0 C) ASTM D 4052
<b>Solubility (ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition Coefficient (n-octanol/water)</b>	Not established.
<b>Auto – ignition temperature</b>	>600 F (>315.56 C) ASTM E 659
<b>Decomposition temperature</b>	Not determined
<b>Viscosity</b>	9.50 cSt (40 C) ASTM D 445

## Section 10: Stability and Reactivity

### 11. Toxicological Information

#### Information on likely routes of exposure

<b>Ingestion</b>	May cause gastrointestinal discomfort if swallowed. Do not induce vomiting. Vomiting may increase risk of product aspiration. May be fatal if swallowed.
<b>Inhalation</b>	May be fatal if enters airways.
<b>Skin contact</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis
<b>Eye contact</b>	May be irritating to eyes.

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<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport
<b>Chemical stability</b>	Stable.
<b>Possibility of hazardous Reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight Hydrocarbons.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Defatting of the skin. Coughing. Shortness of breath. Discomfort in the chest.

#### Information on toxicological effects:

<b>Acute toxicity</b>	Not applicable.
<b>Skin corrosion/irritation</b>	May cause defatting of the skin, but is neither an irritant nor a sensitizer.
<b>Serious eye damage/ Eye irritation</b>	Not classified. May cause minor irritation on eye contact.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not classified.

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<b>Skin sensitization</b> sensitizer.	Not classified. May cause defatting of the skin, but is neither an irritant nor a
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA Nota L – Meets EU requirements of less than 3% (w/w) DMSO extract for total Polycyclic aromatic compound (PAC) using IP346. Not classified
<b>Reproductive toxicity</b>	Contains no ingredient listed as toxic to reproduction
<b>Specific target organ toxicity - single exposure</b>	Not classified
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b> <b>Chronic effect</b>	May be fatal if swallowed and enters airways. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
<b>Further information</b>	Risk of chemical pneumonia after aspiration.

## 12. Ecological Information

<b>Ecotoxicity</b>	Not expected to be harmful to aquatic organisms.
<b>Persistence and degradability</b>	Not inherently biodegradable.
<b>Bioaccumulative potential</b>	Bioaccumulation is unlikely to be significant because of the low water solubility of this product.
<b>Mobility in soil</b>	Not available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component

## 13. Disposal Considerations

<b>Disposal instructions</b>	When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
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<b>Hazardous waste code</b>	Not applicable.
<b>Waste from residue / the Unused products</b>	Disposal of in accordance with local regulations. Avoid discharge into water courses or onto ground.
<b>Contaminated packaging</b>	Empty container should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local facilities.

**14. Transport Information**

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of Marpol 73/78 And the IBC Code</b>	Not Available.

**15. Regulatory Information**

<b>U.S. Federal Regulations</b>	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.  CERCLA/SARA hazardous Substances – Not applicable
<b>TSCA Section 12 (b) Export Notification (40 CFR 707, Subpt. D)</b>	Not regulated.
<b>CERCLA hazardous Substance List (40 CFR 302.4)</b>	Not Listed.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not Listed

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**Superfund Amendment and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard – Yes Delayed Hazard – No Fire Hazard – No Pressure Hazard – No Reactivity Hazard – No
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<b>SARA302 Extremely hazardous substance</b>	Not listed.
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<b>SARA 311/312 Hazardous chemical</b>	Yes
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<b>SARA 313 (TRI reporting)</b>	Not regulated.
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**Other federal regulations**

**Clean Air Act (CCA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as Carcinogens or reproductive toxins.

US. Massachusetts RTK – Substance List

Not regulated.

US. New Jersey Worker and Community Right- to Know Act

Not regulated.

US. Pennsylvania RTK – Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

**International Inventories**

Country(s) or region	Inventory Name	On inventory (yes/no)*
Australia	Australian inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non- Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States/Puerto Rico Toxic Substances Control Act (TSCA) Inventory		Yes

\*A "Yes" indicates that all components of this produce comply with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other Information**

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**References:**

ACGIH  
EPA: AQUIRE Data Base  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
Chemical Abstracts Service Registry Handbook  
CRC: Handbook of Chemistry and Physics  
ILO Safety Cards  
International Labour Organization  
International Maritime Organization Marine Pollutants List  
NFPA Hazardous Chemical Data Sheets  
NIOSH Pocket Guide  
Registry of Toxic Effects of Chemical Substances (RTECS)  
US DOT Hazardous Materials Regulations

**Disclaimer of Expressed and Implied Warranties:**

**The information presented in this Material Safety Data Sheet is based on data believed to be accurate at the time this Material Safety Data Sheet was prepared. However, no warranty of merchantability, fitness for any particular purpose or any other warranty is express or is to be implied regarding the accuracy or completeness of the information provided above, the results to be obtained from the use of this information, the safety of this product or the hazards related to its use. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.**