



# SAFETY DATA SHEET

## 1. Identification

### Identification

**Product name:** PARATHERM™ NF

### Additional identification

**Chemical name:** Mineral oil

### Recommended use and restriction on use

**Recommended use:** Heat Transfer Fluid

**Restrictions on use:** Lubricating oils; Hydraulic fluid additive

### Details of the supplier of the safety data sheet

#### Supplier

**Company Name:** PARATHERM  
A DIV. OF THE LUBRIZOL CORPORATION  
**Address:** 31 PORTLAND ROAD  
WEST CONSHOHOCKEN, PA 19428  
US  
**Telephone:** 610-941-4900

### Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300 (LUBRIZOL)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Aspiration Hazard Category 1

#### Unknown toxicity

|  |         |
|--|---------|
| Acute toxicity, oral                     | 0.0 %   |
| Acute toxicity, dermal                   | 0.0 %   |
| Acute toxicity, inhalation, vapor        | 100.0 % |
| Acute toxicity, inhalation, dust or mist | 100.0 % |

### Label Elements:

#### Hazard Symbol:



**Signal Word:** Danger

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

### Precautionary Statement:

**Response:** IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None identified.

### 3. Composition/information on ingredients

#### General information:

| Chemical name | CAS number | Percent by Weight |
|---------------|------------|-------------------|
| Mineral oil   | 8042-47-5  | 90 - 100%         |

### 4. First-aid measures

**Ingestion:** Do NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Immediately call a POISON CENTER/doctor/...

**Inhalation:** Remove exposed person to fresh air if adverse effects are observed.

**Skin Contact:** Wash with soap and water. Get medical attention if symptoms occur. Launder contaminated clothing before reuse.

**Eye contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** See section 11.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically.

### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** CO<sub>2</sub>, Dry chemical or Foam. Water can be used to cool and protect exposed material.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

#### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Recommend wearing self-contained breathing apparatus.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.

**Methods and material for containment and cleaning up:** Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

**Environmental Precautions:** Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so.

## 7. Handling and storage

**Precautions for safe handling:** Avoid contact with eyes and prolonged or repeated contact with skin. Open container in a well ventilated area. Avoid breathing vapors. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Use grounding and bonding connection when transferring material. In case of spills, beware of slippery floors and surfaces. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment.

**Maximum Handling Temperature:** Not determined.

**Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials. See section 10 for incompatible materials.

**Maximum Storage Temperature:** Not determined.

## 8. Exposure controls/personal protection

### Control Parameters:

#### Occupational Exposure Limits

| Chemical name                     | type | Exposure Limit Values | Source  |
|-----------------------------------|------|-----------------------|---|
| Mineral oil - Inhalable fraction. | TWA  | 5 mg/m3               | US. ACGIH Threshold Limit Values (02 2012)                                  |
| Mineral oil - Mist.               | REL  | 5 mg/m3               | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                          |
| Mineral oil - Mist.               | STEL | 10 mg/m3              | US. NIOSH: Pocket Guide to Chemical Hazards (2010)                          |
| Mineral oil - Mist.               | PEL  | 5 mg/m3               | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

**Appropriate engineering controls:** Adequate ventilation should be provided so that exposure limits are not exceeded.

**Individual protection measures, such as personal protective equipment**

|                                |  |
|--------------------------------|--|
| <b>General information:</b>    | Use personal protective equipment as required.   |
| <b>Eye/face protection:</b>    | If contact is likely, safety glasses with side shields are recommended.  |
| <b>Skin Protection</b>         |  |
| <b>Hand Protection:</b>        | Nitrile. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear. Consult clothing/glove manufacturer to determine appropriate type of glove for given situation.   |
| <b>Other:</b>                  | No data available.   |
| <b>Respiratory Protection:</b> | Use disposable dust/mist mask if the recommended exposure limit is exceeded. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. |
| <b>Hygiene measures:</b>       | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.   |

**9. Physical and chemical properties****Appearance**

|  |  |
|--|--|
| <b>Physical state:</b>                                       | liquid   |
| <b>Form:</b>   | liquid   |
| <b>Color:</b>  | Clear, Colorless   |
| <b>Odor:</b>   | Mild petroleum/solvent   |
| <b>Odor threshold:</b>                                       | No data available.   |
| <b>pH:</b>   | No data available.   |
| <b>Freezing point:</b>                                       | No data available.   |
| <b>Boiling Point:</b>  | > 649 °F (343 °C)  |
| <b>Flash Point:</b>  | > 300 °F (149 °C) (ASTM D93 (Pensky-Martens (A and B Closed Cup))) |
| <b>Evaporation rate:</b>                                     | No data available.   |
| <b>Flammability (solid, gas):</b>                            | No data available.   |
| <b>Upper/lower limit on flammability or explosive limits</b> |  |
| <b>Flammability limit - upper (%):</b>                       | No data available.   |
| <b>Flammability limit - lower (%):</b>                       | No data available.   |
| <b>Explosive limit - upper (%):</b>                          | No data available.   |
| <b>Explosive limit - lower (%):</b>                          | No data available.   |
| <b>Vapor pressure:</b>                                       | 0.1 kPa (20 °C 68 °F)  |
| <b>Vapor density:</b>  | No data available.   |
| <b>Relative density:</b>                                     | 0.883 68 °F (20 °C)  |
| <b>Solubility(ies)</b>                                       |  |
| <b>Solubility in water:</b>                                  | Insoluble in water   |
| <b>Solubility (other):</b>                                   | No data available.   |
| <b>Partition coefficient (n-octanol/water):</b>              | No data available.   |
| <b>Auto-ignition temperature:</b>                            | No data available.   |
| <b>Decomposition temperature:</b>                            | No data available.   |
| <b>Viscosity:</b>  | 18.9 mm <sup>2</sup> /s ( 104 °F (40 °C) )                         |

Other information

**10. Stability and reactivity**

|  |   |
|--|---|
| <b>Reactivity:</b>                         | No data available.  |
| <b>Chemical Stability:</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of Hazardous Reactions:</b> | Will not occur.   |
| <b>Conditions to Avoid:</b>                | Do not expose to excessive heat, ignition sources, or oxidizing materials.  |
| <b>Incompatible Materials:</b>             | Strong oxidizing agents.  |
| <b>Hazardous Decomposition Products:</b>   | Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. |

**11. Toxicological information**

**Information on likely routes of exposure**

|                      |                    |
|----------------------|--------------------|
| <b>Inhalation:</b>   | No data available. |
| <b>Ingestion:</b>    | No data available. |
| <b>Skin Contact:</b> | No data available. |
| <b>Eye contact:</b>  | No data available. |

**Information on toxicological effects**

**Acute toxicity**

**Oral**

|          |  |
|----------|--|
| Product: | Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death. Not classified for acute toxicity based on available data. |
|----------|--|

**Dermal**

|          |  |
|----------|--|
| Product: | Not classified for acute toxicity based on available data. |
|----------|--|

**Inhalation**

|             |   |
|-------------|---|
| Mineral oil | Dusts, mists and fumes: LC 50 (Rat, 4 h): > 5.01 mg/l (Literature)<br>Not classified Dusts, mists and fumes |
|-------------|---|

**Skin Corrosion/Irritation:**

|          |   |
|----------|---|
| Product: | Not classified as a primary skin irritant.<br>Remarks: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. |
|----------|---|

**Serious Eye Damage/Eye Irritation:**

|          |  |
|----------|--|
| Product: | Remarks: Not classified as a primary eye irritant. |
|----------|--|

**Respiratory sensitization:**

No data available

**Skin sensitization:**

|             |  |
|-------------|--|
| Mineral oil | Classification: Not a skin sensitizer. (Literature) Not a skin sensitizer. |
|-------------|--|

**Specific Target Organ Toxicity - Single Exposure:**

Mineral oil  
If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

**Aspiration Hazard:**

Product: May be fatal if swallowed and enters airways.

**Chronic Effects**

**Carcinogenicity:**

Product: This mineral oil has been severely refined and is not considered carcinogenic.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity:**

No data available

**Reproductive toxicity:**

No data available

**Specific Target Organ Toxicity - Repeated Exposure:**

No data available

**12. Ecological information**

**Ecotoxicity**

**Fish**

Mineral oil  
LC 50 (Not reported, 96 h): > 10,000 mg/l  
NOEC (Not reported, 96 h): > 10,000 mg/l

**Aquatic Invertebrates**

Mineral oil  
EC 50 (Water flea (Daphnia magna), 2 d): > 100 mg/l  
NOEC (Water flea (Daphnia magna), 2 d): >= 100 mg/l  
EC 50 (Water flea (Daphnia magna), 21 d): > 10 mg/l  
NOEC (Water flea (Daphnia magna), 21 d): 10 mg/l

**Toxicity to Aquatic Plants**

Mineral oil  
LC 50 (Algae (Pseudokirchneriella subcapitata), 3 d): > 100 mg/l  
NOEC (Algae (Pseudokirchneriella subcapitata), 3 d): > 100 mg/l

**Toxicity to soil dwelling organisms**

No data available

**Sediment Toxicity**

No data available

**Toxicity to Terrestrial Plants**

No data available

**Toxicity to Above-Ground Organisms**

No data available

**Toxicity to microorganisms**

No data available

**Persistence and Degradability**

**Biodegradation**

Mineral oil

OECD TG 301 F, 31.13 %, 28 d, Not readily degradable.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

No data available

**Partition Coefficient n-octanol / water (log Kow)**

No data available

**Mobility:**

No data available

**Other Adverse Effects:**

No data available.

**13. Disposal considerations**

**Disposal instructions:**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied.

**Contaminated Packaging:**

Container packaging may exhibit hazards.

**14. Transport information**

**DOT**

Not regulated.

**IMDG**

Not regulated.

**IATA**

Not regulated.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

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

**Hazard categories**

Immediate

(Acute) Health  
Hazards

**SARA 302 Extremely Hazardous Substance**  
**SARA 304 Emergency Release Notification**  
**SARA 311/312 Hazardous Chemical**  
**SARA 313 (TRI Reporting)**

This product may contain chemical(s) regulated under the Superfund Amendments and Reauthorization Act (SARA). For additional information please contact Lubrizol Customer Assistance: America(s): AmerLZAMCustomerAssistance@Lubrizol.com ; Europe: EMEAICustomerAssistance@Lubrizol.com ; Asia: APCustomerAssistance@Lubrizol.com

## US State Regulations

### US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

## Inventory Status

### Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

### Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

### China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

### European Union (REACH)

To obtain information on the REACH compliance status of this product, please visit [Lubrizol.com/REACH](http://Lubrizol.com/REACH), or e-mail us at [REACH\\_MSDS\\_INQUIRIES@Lubrizol.com](mailto:REACH_MSDS_INQUIRIES@Lubrizol.com)

### Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

### Korea (ECL)

All components are in compliance in Korea.

### New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

### Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

### Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

### Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

### United States (TSCA)

All components of this material are on the US TSCA Inventory.

*The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.*



**16. Other information, including date of preparation or last revision**

**HMIS Hazard ID**

|                  |   |
|------------------|---|
| Health           | 0 |
| Flammability     | 1 |
| Physical Hazards | 0 |

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 08/04/2015  
**Version #:** 1.1  
**Source of information:** Internal company data and other publically available resources.  
**Further Information:** Contact supplier (see Section 1)  
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