

<u>HPHT Lubricant SDS, Safety Data Sheet</u></u> MSDS Sheet, Material Safety Data Sheet

1. Product Identification

Product Name: HPHT Lubricant

<u>Recommended uses and uses advised against (if any)</u>: Oil & Gas Wells fracturing and Industrial Manufacturing.

SUPPLIER

Company: Finoric LLC Address: 8115 Loop 540, Beasley, Texas, 77417 USA

In case of emergency contact: InfoTrac US: 1-800-535-5053 International: 352-323-3500

2. Hazards Identification

GHS, Globally Harmonized System Classification in accordance with 29 CFR 1910 Classification according to Regulation (EC) No 1272/2008

Acute toxicity, oral Category 4 Skin corrosion/irritation Category 2 Acute toxicity, inhalation Category 4 Specific target organ toxicity, single exposure; Respiratory tract irritation Category 3 Specific target organ toxicity, single exposure; Narcotic effects Category 3 Specific target organ toxicity, repeated exposure Category 1 Hazardous to the aquatic environment, acute hazard Category 3

Labeling according GHS USA & Regulation (EC) No 1272/2008



Signal Words: Warning

Hazard Statements: H302 Harmful if swallowed. H315: Causes skin irritation



H332: Harmful if inhaled.

H335: May cause respiratory irritation

H336: May cause drowsiness and dizziness

H372: Causes damage to organs following repeated exposure

H402: Harmful to aquatic life.

Precautionary Statements:

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash contaminated parts thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310: IF SWALLOWED: Immediately call a POSION CENTER or doctor/physician.

P314: Get medical advice/attention if you feel unwell.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P360: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P403 P404: Store in well-ventilated place. Keep container tightly closed.

P501: Dispose of contents/container in accordance with local/national regulation.

3. Composition/Information on Ingredients

<u>Component</u>: Distillates (petroleum), hydro-treated light (hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclic, <2% aromatics) <u>CAS No.</u>: 64742-47-8 <u>Percentage</u>: >40% - <50%

4. First Aid Measures

<u>Inhalation</u>: Remove affected person to fresh air; if normal breathing has not returned within a few minutes after exposure, get medical attention.

<u>Skin</u>: Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse. Seek medical attention.

<u>Eyes</u>: Immediately, flush eyes for 15 minutes in clear running water while holding eyelids open; seek medical attention immediately.

Ingestion: Do not induce vomiting; seek medical attention immediately.

5. Fire Fighting Measures

<u>Flash Point</u>: 100°C (212°F) <u>General Hazards</u>: Product will support combustion.



Extinguishing Media: Carbon dioxide, water fog, dry chemical, chemical foam.

Fire & Explosion Hazard: May evolve oxides of carbon (COx) under fire conditions.

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit. Self - contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat. Caution - material will support combustion!

<u>Unusual Fire and Explosion Hazards</u>: Closed containers can explode due to buildup of pressure when exposed to extreme heat.

<u>Hazardous Combustion Products</u>: Products of combustion include smoke, toxic fumes, oxides of carbon to include carbon monoxide, phosphorous oxides, phosphine and sulfur oxides.

6. Accidental Release Measures

<u>Personal precautions, protective equipment, environmental precautions and emergency</u> <u>procedures</u>: Avoid breathing dust/fumes/gas/mist/vapors/spray. Use individual protective equipment (waterproof boots, suitable protective clothing, safety glasses, etc). Restrict unprotected personnel from the area. Prevent any contact with hot surfaces. Do not approach facing the wind. Do not touch the spilled material. Keep away from drains, surface and groundwater and soil.

<u>Methods and materials used for containment Cleanup procedures and Storage</u>: Contain spilled material. Cover with an inert, non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite), sweep up, and remove to an approved disposal container.

7. Handling and Storage

<u>Precautions for safe handling</u>: Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Wash thoroughly after handling. Do not drink, eat or smoke while handling. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust/fumes/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use individual protective equipment (waterproof boots, suitable protective clothing, safety glasses, etc). Prevent any contact with hot surfaces. Keep container closed when not in use. Containers of this material may be hazardous when empty since they retain product residues. <u>Conditions for safe storage, including any incompatibilities</u>: Store in cool, dry and ventilated area away from heat sources and protected from sunlight in tightly closed original container. Keep air contact to a minimum. Store protected from heat, sparks and ignition sources and incompatible materials. Avoid contact with skin and eyes. Avoid inhalation of dust/mist/vapor. Do not store with incompatible materials like alkalis or strong oxidizing agents. This material will support combustion. Keep this and other chemicals out of reach of children. Use Personal Protective Measures as described in section 8.

8. Exposure Controls/Personal Protection

<u>Engineering Controls</u>: The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation of confined spaces. Use corrosion-resistant, explosion-proof ventilation equipment.

Exposure Limits: DE - TRGS (MAK) - LTE (8h): 140 mg/m3, 20 ppm.



Personal Protective Measures:

<u>Eye/face Protection</u>: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

<u>Skin and body protection</u>: Wear appropriate protective gloves and clothing to prevent skin exposure.

<u>Respiratory Protection</u>: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. <u>Hygiene Measures</u>: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

<u>Other Protective Clothing Or Equipment</u>: Apron, chemical resistant boots, or other equipment should be worn to prevent skin contact, safety eyewash station nearby. Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

9. Physical and Chemical Properties

Appearance: Dark liquid

Odor: Typical odor, woodsy Odor threshold: Not available. pH: 6.5 to 7.5 Relative density: around 0.9. Melting point/freezing point: Not available. Initial boiling point and boiling range: Not available. Flash point: Not available. Auto-ignition temperature: Not available. Decomposition temperature: Not available. Upper/lower flammability or explosive limits: Not available. Vapor Pressure (MM Hg): 1.7 kPa @ 25C Vapor density: Not available. Evaporation rate: Not available. Flammability (solid, gas): Not available. Partition coefficient: n-octanol/water: Not available. Solubility in Water: Insoluble Viscosity: Not available.

10. Stability and Reactivity

<u>Stability</u>: Stable at normal temperatures and operating conditions. <u>Conditions to Avoid</u>: Avoid excessively high temperatures and contact with alkalis or strong oxidizing agents.

Incompatibilities: Not known

<u>Decomposition</u>: Decomposition yields carbon monoxide & dioxide, oxides of sulfur & phosphorous, formaldehyde, phosphine gas, organophosphine vapors, & hydrogen. <u>Polymerization</u>: Polymerization will not occur.



11. Toxicological Information

Eye: Irritation Eye contact may be painful and irritating.
Skin: Irritation Prolonged and repeated skin exposure may be painful and irritating.
Inhalation: Toxicity Inhalation of this product during manufacturing may be irritating.
Reproduction: Not evaluated.
Mutagenicity: Not mutagenic in AMES Test or via micronucleus test on mice.
Carcinogenicity: Not listed as a human carcinogen by OSHA, IARC, ACGIH & NTP
Acute Oral Effects: Oral LD50 – Rats 2000 mg/kg
Acute Inhalation Effect: LC50 Inhalation Rat 5.5mg/4 hours.
Acute Dermal Toxicity: Dermal LD50 – Rabbits 2000 mg/kg.

12. Ecological Information

<u>Acute aquatic toxicity</u>: OECD 203 Fish LL50 > 2 mg/l – duration 96 h – literature data OECD 202 Daphnia magna EL50 > 1.4 mg/l – duration 48 h – literature data OECD 201 Algae EL50 > 1-3 mg/l – duration 72 h – literature data <u>Aquatic chronic toxicity</u>: Fish NOEL = 0.098 mg/l – duration 672 h OECD 211 Daphnia magna EL50 = 0.81 mg/l – duration 504 h – literature data <u>Mobility in soil</u>: Very high. Test KOC = 2.9-4.6 <u>Boiconcentration Factor</u>: = 150-57000 <u>vPvB Substances</u>: None <u>Biodegradation measured at 58% within a 28-day period (OECD 301F).</u>

13. Disposal Considerations

Dispose of in accordance with Local, State, and Federal Regulations. Consult local, state, or Federal Environmental Protection Agency before disposing of any chemicals.

14. Transport Information

DOT Non-Bulk & Bulk: Not regulated <u>IMDG</u>: Not regulated <u>ICAO/IATA</u>: Not regulated

15. Regulatory Information

<u>SARA LISTED</u>: No <u>SARA Title III, Section 311/312</u>: As per section 2. <u>TSCA INVENTORY LISTED</u>: Yes <u>California Prop 65</u>: No Components listed.



16. Other Information

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Disclaimer:

Our company provides this SDS MSDS information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This (M)SDS sheet is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.