

SAFETY DATA SHEET (SDS)

This material is to be used for research purposes only under the supervision of a technically qualified individual. The toxicological properties may have not been completely characterized. Please determine your responsibilities under your local regulations.

1. Identification of the substance or mixture and of the supplier

Identification

Product Name: Pure Lube

Additional identification

Chemical name: Tall oil fatty acid

Recommended use and restriction on use

Recommended use: Not Determined.

Restrictions on use: Not Determined.

Details of the supplier of the safety data sheet

Supplier

Company name: Opti-Lube
Address: 1195 S 1680 W
Orem, UT 84058
USA

Telephone: 801-491-3717

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887, OR WITHIN THE USA 801 491 3717

2. Hazard(s) identification

Hazard Classification of the substance or mixture

Hazard Classification Not classified

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word

Hazard Statement: Not applicable

Precautionary Statement: Not applicable

Other hazards which do not result in GHS classification::

None identified

3. Composition/Information on Ingredients

General Information:

The components are not hazardous or are below the required disclosure limits.

4. First-aid measures

Description of first aid measures

Ingestion:	Treat syptomatically. Get medical attention.
Inhalation:	Remove exposed person to fresh air if adverse effects are observed.
Eye Contact:	Any material that concts the eye should be washed out immediately with water. If easy to do, remove contact lenses.
Skin Contact:	Wash with soap and water. If skin irritation occurs, get medical attention.

Most important symptoms and effects, both acute and delayed: 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 explosian hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: CO2, Dry chemical, foam, water spray, water fog.

Unsuitable extinguishing media: Not determined.

Specific hazard arising from the chemical: See section 10 for additional information.

Advice for firefighters, Special protective equipment and precautions for firefighters:

Special fire fighting Procedures: No data available.

Special protective equipment for firefighters: Recomended 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 cleanup: Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absobed on inert material.

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

7. Handling and Storage

Precautions for safe handling:	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	None of the components have assigned exposure limits.
Appropriate engineering Controls:	No special requirements under ordinary conditions of use and with adequate ventilation.
Individual protection measures, such as personal protective equipment	
General information:	Use personal protective equipment as required.
Eye/face protection:	If contact is likely, safety glasses with side shields are recommended.
Skin protection	
Hand protection:	Rubber. Suitable gloves can be recommended by the glove supplier.
Other:	No data available.
Respiratory protection:	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.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling 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

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	light yellow
Oder:	mild
Oder threshold:	No data available
pH:	No data available
Freezing point:	-7°C
Boiling point:	547°F (286°C)
Flash point:	399°F (204°C) (Cleavland Open Cup)
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower limit on flammability or explosive limits	
Flammability limit – upper (%):	No data available

Flammability limit – lower (%):	No data available
Explosive limit – upper (%):	No data available
Explosive limit – lower (%):	No data available
Vapor pressure (air=1):	No data available
Vapor density:	No data available
Relative density:	0.989 77°F (25°C)
Solubility(ies)	
Solubility in water:	No data available
Solubility (other):	No data available
Partition coefficient (n-octanol/water):	4.89 (Measured)
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	10 MM2/S (122°F (50°C))

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Do not expose to excessive heat, ignition sources or oxidizing materials.
Incompatible Materials:	Reducing agents. Strong oxidizing agents. Strong alkalis.
Hazardous Decomposition Products:	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

Inhalation:	No data available
Ingestion:	No data available
Skin contact:	No data available
Eye contact:	No data available

Information on toxicology effects, Acute toxicity

Oral

Product: LD 50 (Rat): > 5,000 mg/kg (read across) Not classified. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

Dermal

Product: LD 50 (Rabbit): > 2,000 mg/kg (read across) Not classified

Inhalation

Product: No data available

Skin Corrosion/Irritation

Product: Classification: Not irritating (read across); Rabbit. Not expected to be a primary skin irritant.
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. Not classified as a primary skin irritant.

Serious Eye Damage/Eye Irritation

Product: Classification: Not irritating (read across); Rabbit. Remarks: Not classified as a primary eye irritant.

Respiratory sensitization: No data available.

Skin sensitization:

Product Classification: Not a skin sensitizer. (Read across)

Specific Target Organ Toxicity – Single Exposure

No data available

Aspiration Hazard

No data available

Chronic effects

Carcinogenicity: No data available.

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

Product LC 50 (Golden Orfe, 4 d): > 1,000 mg/l

Aquatic Invertebrates

Product EC50 (Water flea (Daphnia magna), 2d): > 1,000 mg/l

Toxicity to Aquatic Plants

Product EC50 (Green algae (Selenastrum capricornutum), 4 d): > 1,000mg/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

Product OECD TG 301 B, 74%, 28 d, Readily biodegradable

Bioaccumulative Potential

Bioconcentration Factor (BCF) No data available

Partial Coefficient n-octanol / water (log Kow)

Product Log Kow: 4.89 (Measured)

Mobility No data available

Other Adverse Effects: No data available

13. Disposal considerations

Disposal Methods: 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 the 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 transport 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

None known.

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 Opti-Lube Customer Assistance: sales@opti-lube.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 Substance 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 email us at sales@opti-lube.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 (NZloc)

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

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.

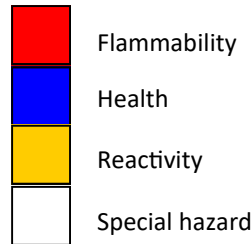
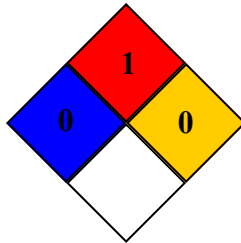
16. Other information, including date of preparation or last revision

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;



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Source of Information: Internal Company data and other publically available resources.
Further Information: Contact Supplier (see Section 1)
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