SAFETY DATA SHEET

Version: 1.0
Revision Date: 10/02/2020

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: **StictionRx**

Additional identification

Chemical name: Not applicable for mixtures.

Recommended use and restriction on use

Recommended use: Lubricating oil additive

Restrictions on use:

Details of the supplier of the safety data sheet

Company Name: Opti-Lube Inc

Address: 1646 W Business Park Drive, Suite B
Orem, UT 84058
USA

Telephone: 801-491-3717

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL (+1) 801-850-8553, OR WITHIN THE USA 801-491-3717

2. Hazard(s) identification

CLASSIFICATION: Not classified as hazardous according to 29 CFR 1910.1200 (2012).

HAZARDS NOT OTHERWISE CLASSIFIED: Not Applicable

3. Composition/Information on Ingredients

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	45 - 50 %weight

4. First-aid Measures

Description of first aid measures:

Eye Contact: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water. If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses, if worn. Get immediate medical attention.

Skin Contact: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool in water. See a doctor for extensive burns. Do not

try to peel the solidified material from the skin, or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER HEALTH EFFECTS: Not classified.

Indication of any immediate medical attention and special treatment needed: Not Applicable.

5. Fire-fighting measures

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Calcium, Sulfur, Boron, Nitrogen.

6. Accidental release measures

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: 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. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non- combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool before proceeding with disposal methods.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424- 8802 as appropriate or required.

7. Handling and Storage

General Handling Information: The maximum handling temperature is 60°C. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: Avoid contact of heated material with eyes, skin, and clothing.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

General Storage Information: The maximum short-term (<2 week(s)) storage temperature is 60°C. The maximum long-term (>2 week(s)) storage temperature is 40°C.

8. Exposure Controls / Personal Protection

GENERAL CONSIDERATIONS: Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS: Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice. If this material is heated, wear chemical goggles or safety glasses or a face shield.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Nitrile Rubber, Silver Shield, Viton. If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate to prevent skin contact.

Respiratory Protection: No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

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Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m3	10 mg/m3	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	5 mg/m3	--	--	--

9. Physical and chemical properties

Attention: the data below are typical values and do not constitute a specification.

Color:	Brown
Physical State:	Liquid
Odor:	Petroleum odor
Odor Threshold:	No data available
pH:	Not Applicable
Vapor Pressure:	Not determined
Vapor Density (vs. Air = 1):	No data available
Initial Boiling Point:	No data available
Solubility:	Insoluble in water.
Freezing Point	No data available
Melting Point	No data available
Specific Gravity:	1 @ 15.6°C (60°F) (Estimated)
Density:	1.12 kg/l @ 15°C (59°F)
Viscosity:	80 cSt @ 40°C (104°F) (Minimum)
Coefficient of Therm. Expansion / °F:	0.00035
Evaporation Rate:	No data available
Decomposition temperature:	No data available
Octanol/Water Partition Coefficient:	No data available
FLAMMABLE PROPERTIES:	
Flammability (solid, gas):	No data available
Flashpoint:	(Cleveland Open Cup) 170 °C (338 °F) (Minimum)
Autoignition:	No data available
Flammability (Explosive) Limits (% by volume in air):	
Lower:	No data available
Upper:	No data available

10. Stability and reactivity

Reactivity:	May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Chemical Stability:	This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Conditions to Avoid:	Do not heat above flash point.
Incompatibility With Other Materials:	Not applicable.
Hazardous Decomposition Products:	None known (None expected).
Hazardous Polymerization:	Hazardous polymerization will not occur.

11. Toxicological Information

Information on toxicological effects:

Serious Eye Damage/Irritation:	The eye irritation hazard is based on evaluation of data for similar materials.
Skin Corrosion/Irritation:	The skin irritation hazard is based on evaluation of data for similar materials.
Skin Sensitization:	The skin sensitization hazard is based on evaluation of data for similar materials.
Acute Dermal Toxicity:	The acute dermal toxicity hazard is based on evaluation of data for similar materials.
Acute Oral Toxicity:	The acute oral toxicity hazard is based on evaluation of data for similar materials.
Acute Inhalation Toxicity:	The acute inhalation toxicity hazard is based on evaluation of data for similar materials.
Acute toxicity Estimate:	Not Determind
Germ Cell Mutagenicity:	No data available
Carcinogenicity:	The hazard evaluation is based on data for components or a similar material.
Reproductive toxicity:	The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity - Single Exposure:	The hazard evaluation is based on data for components or a similar material.
Specific Target Organ Toxicity - Repeated Exposure:	The hazard evaluation is based on data for components or a similar material.
ADDITIONAL TOXICOLOGY INFORMATION:	This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

12. Ecological Information

Ecotoxicity:	This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from products of a similar structure and composition.

Mobility:	No data available.
PERSISTENCE AND DEGRADABILITY	This material is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from products of a similar structure and composition.
POTENTIAL TO BIOACCUMULATE	Bioconcentration Factor: No data available. Octanol/Water Partition Coefficient: No data available

13. Disposal considerations

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by international, country, or local laws and regulations.

14. Transport Information

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description:	NOT REGULATED AS HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR
IMO/IMDG Shipping Description:	NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE
ICAO/IATA Shipping Description:	NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	Not applicable.

15. Regulatory Information

EPCRA 311/312 Categories:

1. Immediate (Acute) Health Effects: No
2. Delayed (Chronic) Health Effects: No
3. Fire Hazard: No
4. Sudden Release of Pressure Hazard: No
5. Reactivity Hazard: No

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1 03=EPCRA 313
01-2A=IARC Group 2A 04=CA Proposition 65
01-2B=IARC Group 2B 05=MA RTK
02=NTP Carcinogen 06=NJ RTK
07=PA RTK

No components of this material were found on the regulatory lists above.

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CHEMICAL INVENTORIES: All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States). Please contact Oronite at SDS_REACH@chevron.com for more information concerning EU-REACH.

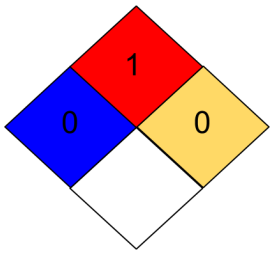
16. Other information, including date of preparation or last revision

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



Flammability
Health
Physical Hazards
Reactivity

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

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Abbreviations and acronyms ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways. ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail. CAS: Chemical Abstract Service Number. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods Code. DPD Dangerous Preparation Directive. UN number: United Nations number. No EC: European Commission Number. CLP: Classification, labeling and packaging. VOCs: Volatile Organic Compound. CVPvB: very persistent and very bioaccumulative substances.

Source of Information: Internal Company data and other publically available resources.

Further Information: Contact Supplier (see Section 1)

Disclaimer: As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim and liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material of the results to be obtained from the use thereof. Compliance with all applicable feral, state, and local regulations remains the responsibility of the user.