



SAFETY DATA SHEET

Version: 1.2

Revision Date: 8/24/2020

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: Lithium Block Grease
Article Number: 10497S

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:

During normal business hours: (801)-491-3717

2. Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Label Elements:

GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard Pictograms:



GHS08

Signal Word: Danger

Hazard-determining components of labeling: Distillates (petroleum), hydrotreated heavy naphthenic

Hazard statements: May be fatal if swallowed and enters airways.



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Precautionary statements:

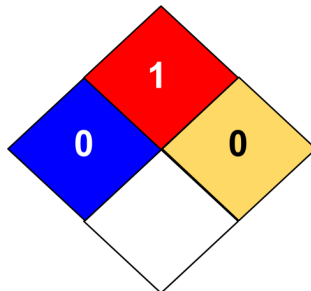
If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:**NFPA ratings (scale 0 - 4)**

Health	0
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Flammability	1
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Reactivity	0
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HMIS-ratings (scale 0 - 4)

Flammability

Health

Reactivity

Special hazard

Other hazards:**Results of PBT and vPvB assessment**

PBT: No applicable.

vPvB: No applicable.

3. Composition/Information on Ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with non-hazardous additions.

Dangerous components:

64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic	10-30%
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4. First-aid Measures

Description of first aid measures:

Ingestion: If symptoms persist consult a doctor.



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Inhalation:	Supply fresh air; consult a doctor in case of complaints.
Eye Contact:	Rinse opened eye for several minutes under running water.
Skin Contact:	Generally the product does not irritate the skin.
Note To Physician:	Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.

5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media:	Use fire fighting measures that suit the environment.
Specific hazard arising from the substance or mixture:	No further relevant information available.
Advice for firefighters, Special protective equipment and precautions for firefighters:	No special measures required.

6. Accidental release measures

Protective Precautions, Protective Equipment and Emergency Procedures:	Not required.
Methods and material for containment and cleanup:	Dispose contaminated material as waste according to item 13.
Environment Precautions:	Do not allow to enter sewers/surface or ground water.
References to other sections:	See Section 7 for safe handling. See Section 8 for information on personal protection equipment See Section 13 for disposal information.

Protective Action Criteria for Chemicals:

PAC-1:		
4485-12-5	Lithium Octadecanoate	45 mg/m ³
8052-42-4	Asphaltic Resin	30 mg/m ³
PAC-2:		
4485-12-5	Lithium Octadecanoate	500 mg/m ³
8052-42-4	Asphaltic Resin	330 mg/m ³
PAC-3:		
4485-12-5	Lithium Octadecanoate	3,000 mg/m ³
8052-42-4	Asphaltic Resin	2,000 mg/m ³



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7. Handling and Storage

Handling:

Precautions for Safe Handling: No special precautions are necessary if used correctly.

Information about protection against explosion and fires: No special measures required.

Storage:

Conditions for safe storage, including any incompatibilities: Keep cool. Store in a well-ventilated place.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s): No further relevant information available.

8. Exposure Controls / Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters:

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.



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Penetration time of glove material:	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection:	Not required.

9. Physical and chemical properties

Information on basic physical and chemical properties

Form:	Solid
Appearance (Color):	Light amber
Odor:	Petroleum-like
Odor Threshold:	Not determined
pH - value:	Not applicable
Change in condition:	
Melting Point/range:	Not determined
Boiling Point/range:	370-595 °C (698-1,039 °F)
Flash Point:	>163 °C (>325.4 °F)
Flammability (solid, gas):	Not determined
Ignition temperature:	>315 °C (>599 °F)
Decomposition Temperature:	Not determined
Auto-ignition:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosive Limit- upper (%):	No data available
Explosive Limit- lower (%):	No data available
Vapor Pressure (Air=1):	Not applicable.
Density at 20 °C (68 °F):	0.93479 g/cm ³ (7.80082 lbs/gal)
Relative Density:	Not determined
Vapor Density:	Not applicable
Evaporation Rate:	Not applicable
Solubility in / miscibility with water:	Soluble
Partition Coefficient n-octanol / water:	Not determined
Viscosity:	
Dynamic:	Not applicable
Kinematic:	Not applicable
Solvent Content:	0.00%
VOC content:	
Solids content:	20.10%
Other information:	No further relevant information available.

10. Stability and reactivity

Reactivity:	No further relevant information available.
Chemical Stability:	Not determined



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Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
Possibility of Hazardous Reactions:	No dangerous reactions known.
Conditions To Avoid:	No further relevant information available.
Incompatible Materials:	No further relevant information available.
Hazardous Decomposition Products:	No dangerous decomposition products known.

11. Toxicological Information

Information on toxicological effects:

Acute toxicity:

LD/LC50 values that are relevant for classification:

4485-12-5 Lithium Octadecanoate

Oral LD50 15,000 mg/kg (rat)

Primary irritant effect:

Skin contact:	No irritating effect.
Eye contact:	No irritating effect.
Sensization:	No sensitizing effects known.

Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations:

Carcinogenic categories:

OSHA-Ca (Occupational Safety & Health Administration): (Substances not listed)

None of the ingredients is listed.

12. Ecological Information

Information on toxicological effects:

Acute toxicity:	No further relevant information available.
Persistence and degradability:	No further relevant information available.

Behavior in environmental systems

Bioaccumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.

Additional ecological information:



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General Notes: Water hazard class 1 (self-assessment): Slightly hazardous for water. Do not allow undiluted product of large quantities to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13. Disposal considerations

Waste treatment methods

Rcommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings

Recommendation: Disposal must be made according to officail regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14. Transport Information

UN Number:

DOT, ADN, IMDG, IATA Not regulated.

UN Proper Shipping Name:

DOT, ADN, IMDG, IATA Not regulated.

Transport Hazard Class(es):

DOT, ADN, IMDG, IATA
Classes Not regulated.

Packing Group:

DOT, ADN, IMDG, IATA Not regulated.

Environmental Hazards

Marine Pollutant: No

Special precautions for user: Not applicable

Transport in bulk according to annex II of MARPOL73-78 and the IBC Code: Not applicable.

UN "Model Regulaon": Not regulated.

15. Regulatory Information

Safety, health and environmental regulaon/legislaon specific for the substance or mixture.



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SARA**Sec 335 (extremely hazardous substances):** None of the ingredients are listed.**Sec 313 (Specific toxic chemical listings):** None of the ingredients are listed.**Hazardous Air Pollutants:** None of the ingredients are listed.**Proposition 65****Chemicals known to cause cancer:** None of the ingredients are listed.**Chemicals known to cause reproductive toxicity to females:** None of the ingredients are listed.**Chemicals known to cause reproductive toxicity to males:** None of the ingredients are listed.**Chemicals known to cause developmental toxicity:** None of the ingredients are listed.**Carcinogenic Categories****TLV (Threshold limit value established by ACGIH)** 8052-42-4 Asphaltic Resin**NIOSH-Ca (National Institute for Occupational Safety and Health):** None of the ingredients is listed.**GHS Label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard Pictograms**GHS08****Signal Word**

Danger

Hazard-determining components of labeling: Distillates (petroleum), hydrotreated heavy naphthenic**Hazard statements:** May be fatal if swallowed and enters airways.**Precautionary statements:** If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16. Other information, including date of preparation or last revision**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Technical Department**Contact:** sales@op-lube.com or 801-491-3717**Date of preparation/last revision:** 8/24/20**Abbreviations and acronyms:****ADR:** Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)



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IMDG:	International Maritime Code for Dangerous Goods.
DOT:	US Department of Transportation.
IATA:	International Air Transport Association.
ACGIH:	American Conference of Governmental Industrial Hygienists.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
ELINCS:	European List of Notified Chemical Substances.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
NFPA:	National Fire Protection Association (USA).
HMIS:	Hazardous Materials Identification system (USA).
LC50:	Lethal concentration, 50 percent.
LD50:	Lethal dose, 50 percent.
Skin Irrit. 2:	Skin corrosion/irritation, hazard category 2
Eye Irrit. 2A	Serious eye damage/eye irritation, hazard category 2A
Skin Sens. 1:	Sensitisation - skin, hazard category 1
STOT SE 3:	Specific target organ toxicity - single exposure, hazard category 3

*Data compared to the previous version altered.