

Revision Date: 02.08.2016

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: Lithium Block Grease

Article Number: 10497

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:

During normal open hours: +1 (801) 491-3717

2. Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

Label Elements:

GHS label elements: Void
Hazard Pictoprams: Void
Sidnal word: Void
Hazard statements: Void
Classification system: Void
NFPA ratings (scale 0 - 4)

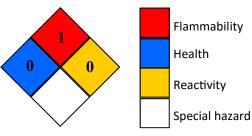


Other hazards

Results of PBT and vPvB assessment

PBT: Void vPvB: Void







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3. Composition/Information on Ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components: Void

4. First-aid measures

Description of first aid measures

General information: No special measures required.

Ingestion: If symptoms persist consult a doctor.

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.

Information for doctor: Most important sysmptoms and effects, both acute and delayed No

further relevant information available.

Indication oof any immediate medical attention and special treatment

needed No further relevant information available.

5. Fire-fighting measures

Suitable extinguishing media: Use fire fighting measures that suit the environment.

Specific hazard arising from Vapors may cause a flash fire or ignite explosively. Prevent buildup of

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

Personal precautions, protective equipment and emergency procedures:

Not required.

Environmental percautions: Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleanup:

Pick up mechanically.

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.

7. Handling and Storage

Handling

Precautions for safe handling: No special percautions are nevessary if used correctly. **Information about protection against explosions and fires:** No special measures required.

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

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

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

Further information about storage conditions: None.

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



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8. Exposure Controls/personal Protection

Control Parameters:

Components with limit values that require monitoring at the workplace:

64742-52-5 Distillates (petroleum), hydrotreated heavy naphthenic (50 - 100%)	
ACGIH TLV	Short-term value:10 mg/m3
OSHA PEL	Long-term value: 5 mg/m3 Long-term value: 5 mg/m3
64742-52-5 Distillates (petroleum), hydrotreated heavy naphthenic (10 - <25%)	
ACGIH TLV	Short-term value:10 mg/m3 Long-term value: 5 mg/m3
OSHA PEL	Long-term value: 5 mg/m3
4485-12-5 Lithium Octadecanoate (10—<25%)	
ACGIH TLV	Long-term value: 10 mg/m3

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form: Solid

Color: Light amber
Oder: Petroleum-like
Oder threshold: Not determined
pH - value: Not applicable

Change in condition:

Melting point/melting range
Boiling point/boiling range
Flash point:

Flammability (solid, gas):

Undetermined.
370 °C (698 °F)
164 °C (327 °F)
Not determined.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits

Lower: Not determined.
Upper: Not determined.
Vapor pressure (air=1): Not applicable

Density at 20 °C (68 °F): 0.93674 g/cm3 (7.817 lbs/gal)

Realative Density:

Vapor Density:

Evaporation rate:

Solubility in / miscibility with water:

Partition coefficient (n-octanol/water):

Not determined.

Not determined.

Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable. **Ignition temperature:** > 315 °C (> 599 °F)

Auto-ignighting: Product is not self-ignighting.

Decomposition temperature: Not Determined

Solvent Content, Organic Solvent: 0.0% Solids content: 20.1%

Other information: No further relevant information available.



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10. Stability and reactivity

Reactivity: Not determined.

Chemical stability: Not determined.

Thermal decomposition / condations to be avoided: No decomposition if used according to specifications.

Possibility of Hazardous Reactions: No dangerous reactions known.

Conditions to Avoid:

Incompatible Materials:

No further relevant information available.

No further relevant information available.

No dangerous decomposition products known.

11. Toxicological Information

Information on likely routes of exposure

Skin contact: No irritating effect.

Eye contact: No irritating effect.

Sensitization: No sensitizing effects known.

Information on toxicologica effects:

Acute toxicity: LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

 Oral
 LD50
 9970 mg/kg (rat)

 Dermal
 LD50
 769231 mg/kg (rabbit)

 Inhalative
 LC50/4h
 145231 mg/l (rat)

Additional toxicological information: The product is not subject to classification according to internally

approved calculation methods for preparations. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information

provided to us.

Carcinogenic categories IARC (International Aagency for Research on Cancer)

Asphaltic Resin 2 **NTP (National Toxicology Program)**None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12. Ecological Information

Tocixity

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

General Notes: Water hazard class 1 (self-assessment): Slightly hazardous for

water. Do not allow undiluted product of large quantities 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.



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13. Disposal considerations

Waste treatment methods

Rcommendation: Smaller quantitier can be disposed of with household waste.

Uncleaned packagings

Recommendation: Disposal must be made according to officail regulations.

14. Transport Information

UN - Number

DOT, ADN, IMDG, IATANot 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, IMDG, IATA Not regulated.

Environtmental hazards

Marine pollutant: No.

Special percautions for user: Not applicable.

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

UN "Model Regulation": -

15. Regulatory Information

Safety, health and environmental regulation/legislation specific for the substance or mixture.

SARA

Section 335 (extremely hazardous substances): None of the ingredients are listed. Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

TSCA (toxic substance control act): All 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.

Chamicals known to cause developmental toxicity: None of the ingredients are listed.

Carsinogenic Categories

EPA (Environmental Protection Agency)None of the ingredients are listed.

TLV (Threshold limit value establised by ACGIH) Asphaltic Resin

NIOSH-Ca (National Institute for Occupational Safety and Health: Asphaltic Resin.

GHS Label elements Void
Hazard Pictograms Void
Signal Word Void
Hazard statements Void

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.



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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@opti-lube.com or 801-491-3717

Date of preparation / last revision:02/08/2016

Abbreviations and acronyms:

ADR: Accord europeen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carrige of Dangerous

Goods by Road)

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.

^{*}Data compared to the previos version altered.