

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsens White Lithium Grease
MSDS NO. 4604
Revision Date: 04/11/2006
Date Printed: 02/08/2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsens White Lithium Grease
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300
Supplier: Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	OSHA TWA	OSHA STEL	OSHA SKIN
Butane 106-97-8	1-6	Not Listed	Not Listed	Not Listed
Heptane 142-82-5	50-69	Not Listed	Not Listed	Not Listed
Propane 74-98-6	1-6	Not Listed	Not Listed	Not Listed
Lithium Grease 7620-77-1	45-64	Not Listed	Not Listed	Not Listed

Component	Weight %	OSHA Z PEL	OSHA Z TWA	OSHA Z Ceiling
Butane 106-97-8	1-6	Not Listed	1900 mg/m ³ 800 ppm	Not Listed
Heptane 142-82-5	50-69	2000 mg/m ³ 500 ppm	1600 mg/m ³ 400 ppm	Not Listed
Propane 74-98-6	1-6	1800 mg/m ³ 1000 ppm	1800 mg/m ³ 1000 ppm	Not Listed
Lithium Grease 7620-77-1	45-64	Not Listed	Not Listed	Not Listed

Component	ACGIH TLV TWA	ACGIH TLV STEL	ACGIH TLV Ceiling
Butane 106-97-8	1000 ppm	Not Listed	Not Listed
Heptane 142-82-5	400 ppm	500 ppm	Not Listed
Propane 74-98-6	1000 ppm	Not Listed	Not Listed
Lithium Grease 7620-77-1	Not Listed	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning: Extremely Flammable. Content under pressure. This material is an eye and skin irritant. Keep away from heat, sparks and flame. Causes respiratory irritation. Possible redness and defatting may result from prolonged skin exposure to this material. Excessive inhalation causes headache, dizziness, nausea, and incoordination. Ingestion of this product may cause gastrointestinal distress with symptoms of nausea, vomiting, diarrhea and abdominal pain.

HMIS Classification: Health: *2 Flammability: 4 Physical Hazard: 2
NFPA Rating: Health: 2 Flammability: 4 Reactivity: 0

4. FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Seek medical attention if irritation persists.

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4. FIRST AID MEASURES

Ingestion: If swallowed, give at least 3-4 glasses of water, but do not induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention. If vomiting occurs, keep head lower than hips to prevent aspiration.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin Contact: Wash with soap and water for 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention. Remove contaminated clothing and shoes, and launder before reuse.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): Not Determined
Flash Point Method: Not Applicable
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined
Autoignition Temperature °F(°C): Not Determined
Extinguishing Media: Dry chemical. Carbon dioxide. Use water spray to keep containers cool that are exposed to heat or flames. Foam.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Vapor may cause flash fire.

Hazardous Combustion Products: Carbon Dioxide. Carbon Monoxide.

Aerosol Comments: NFPA Level 3 Aerosol

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.

Spill Procedures: Contain any liquid from leaking containers. Avoid all sources of ignition; heat, sparks and open flames.

Action to be taken if material is released or spilled: Do not puncture or incinerate container. Contents under pressure. Wear proper protective equipment as specified in the protective equipment section. Remove sources of ignition. Leaking containers should be removed to an isolated, well-ventilated area and transferred to other suitable containers. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters. Keep out of lakes, ponds or streams.

7. HANDLING AND STORAGE

Handling and Storage: Caution: Contents under pressure. Keep away from heat and open flame. Use only in a well ventilated area. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Do not puncture, incinerate or store above 120 F. Exposure to high temperatures may cause bursting. DO NOT store in the passenger compartment of an automobile.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in a well ventilated area. Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Skin Protection: Avoid skin contact. Wear protective clothing and gloves.

Respiratory Protection: Do not breath mist or vapor. Use in a well ventilated area. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White viscous liquid.
Odor: SOLVENT
pH Value: Not Determined
Vapor Pressure: 46 psig @ 70 F
Vapor Density (Air=1): Not Determined
Boiling Point (°F): Not Determined
Melting/Freezing Point: Not Determined
Solubility in Water: NEGLIGIBLE

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9. PHYSICAL AND CHEMICAL PROPERTIES

Bulk Density at 20°C: Not Determined
Molecular Weight: Mixture
Specific Gravity (H2O=1): .78
Viscosity: Not Determined.
Evaporation Rate: Not Determined
VOC Content(%): Not determined.
Decomposition Temperature: Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: Keep away from heat, sparks and flame. Avoid any source of ignition. Do not expose to heat or store at temperatures above 120 F.
Materials to Avoid: Contact with oxidizing agents. Concentrated oxygen.
Hazardous Decomposition Products: Carbon monoxide. Silica. Formaldehyde is a byproduct of oxidative thermal decomposition.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Component	Route	Species	Dose
Butane 106-97-8	Inhalation	Rats	LC50, 658 gm/m ³ /4H
Heptane 142-82-5	Inhalation	Rats	LC50 103 gm/m ³ /4H
Propane 74-98-6	NA	NA	Not known.
Lithium Grease 7620-77-1	NA	NA	None Known

Carcinogenicity:

Component	IARC	NTP	OSHA
Butane 106-97-8	Not Listed	Not Listed	Not Listed
Heptane 142-82-5	Not Listed	Not Listed	Not Listed
Propane 74-98-6	Not Listed	Not Listed	Not Listed
Lithium Grease 7620-77-1	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Remarks: Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: Not determined.
Waste Management: Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.
Disposal Method: Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:
Proper Shipping Name: ORM-D CONSUMER COMMODITY
Hazard Class: ORM-D
UN/NA Number: Not Applicable

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14. TRANSPORTATION INFORMATION

DOT Packing Group: Not Applicable

IMDG:

Proper Shipping Name: Aerosols (Limited Quantity)
 Hazard Class: 2.1
 Hazard Subclass: Not determined.
 UN No.: UN1950
 Packing Group: PG II
 Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Component	SARA 313	SARA 302	TPQ	RQ
Butane 106-97-8	Not Listed	Not Listed	Not Listed	Not Listed
Heptane 142-82-5	Not Listed	Not Listed	Not Listed	Not Listed
Propane 74-98-6	Not Listed	Not Listed	Not Listed	Not Listed
Lithium Grease 7620-77-1	Not Listed	Not Listed	Not Listed	Not Listed

US OSHA HEALTH CLASSIFICATION: Hazardous per OSHA 29 CFR 1910.1200
SARA 311/312 Hazard Categories: Acute Health - YES, Chronic Health - NO, Fire - YES, Reactive - NO, Pressure - YES

State Regulations:

Component	California Prop. 65 Cancer list	California - Prop 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Butane 106-97-8	Not Listed	Not Listed	Not Listed	Not Listed
Heptane 142-82-5	Not Listed	Not Listed	Not Listed	Not Listed
Propane 74-98-6	Not Listed	Not Listed	Not Listed	Not Listed
Lithium Grease 7620-77-1	Not Listed	Not Listed	Not Listed	Not Listed

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Component	New Jersey Right-to-Know List:
Butane 106-97-8	Substance no. 0273 Substance no. 2422 Substance no. 2423 Substance no. 2425 Substance no. 2426 Substance no. 2427 Substance no. 2428 Substance no. 2429 Substance no. 2430
Heptane 142-82-5	Substance no. 2422 Substance no. 2423 Substance no. 2425 Substance no. 2426 Substance no. 2427 Substance no. 2428 Substance no. 2429 Substance no. 2430 Substance no. 1339
Propane 74-98-6	Substance no. 2422 Substance no. 2423 Substance no. 2425 Substance no. 2426 Substance no. 2427 Substance no. 2428 Substance no. 2429 Substance no. 2430 Substance no. 1594

U.S. TSCA: The components of this product are listed on the TSCA Inventory.
Canadian Inventory: The components of this product are listed on the Canadian DSL or NDSL Inventory.

16. OTHER INFORMATION

General Notes:
Disclaimer:

Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system. The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.