

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DRI-LUBE PLUS AEROSOL	Product Code 5438
Recommended Use Lubricant	Chemical Nature Alcoholic solution
Information on Manufacturer	Emergency Telephone Number
CERTIFIED LABS, DIV. OF NCH CORP.	CHEMTREC ® 800-424-9300
BOX 152170	
IRVING, TEXAS 75015	

2. HAZARDS IDENTIFICATION

Emergency Overview
Danger
Extremely flammable
May be harmful if inhaled
May cause skin irritation
Causes eye irritation
Harmful or fatal if swallowed
Contents under pressure

Color Dark gray	Physical State Liquid	Odor Alcoholic
Potential Health Effects		
Principle Route of Exposure	Inhalation, Skin contact, Eye contact.	
Primary Routes of Entry	Inhalation, Skin Absorption.	
Acute Effects		
Eyes	Causes eye irritation.	
Skin	May cause skin irritation. The product may be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.	
Inhalation	May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause headache and dizziness.	
Ingestion	Ingestion may cause irritation to mucous membranes. Causes headache, drowsiness or other effects to the central nervous system.	
	Aspiration hazard if swallowed - can enter lungs and cause damage.	
Chronic Effects	Ingestion may cause lowering of blood pressure. Liver and kidney injuries may occur.	
Target Organ Effects	Blood, Central nervous system, Heart, Liver, Lungs, and Kidneys., Skin, Eyes.	
Aggravated Medical Conditions	Blood disorders. Cardiovascular. Kidney disorders. Skin disorders. Respiratory disorders. Neurological disorders.	
Potential Environmental Effects	See Section 12 for additional Ecological information	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
Butane	106-97-8
Molybdenum disulfide	1317-33-5
Petroleum naphtha, light aromatic	64742-95-6
Isopropyl alcohol	67-63-0
Propane	74-98-6
Ethylcellulose	9004-57-3
Pseudocumene	95-63-6

4. FIRST AID MEASURES

General Advice	Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
Skin Contact	Wash off immediately with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion	Drink 1 or 2 glasses of water. Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
Notes to Physician	Aspiration hazard if swallowed - can enter lungs and cause damage.

5. FIRE-FIGHTING MEASURES

Flash Point 47°F / 8°C	Method Seta closed cup
Autoignition Temperature No information available	
Flammability Limits in Air Mixture	Upper 12.7 Lower 0.9
Suitable Extinguishing Media	
Water spray. Carbon dioxide (CO2). Foam. Alcohol-resistant foam . Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Specific Hazards Arising from the Chemical	
Solvent vapors are heavier than air and may spread along floors . Vapors may ignite and explode. Flame extension: >36 inches / >91.4 cm and Burnback: 6 inches / 15 cm	
Protective Equipment and Precautions for Firefighters	
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.	
NFPA Health 2 Flammability 4 Instability 0	
HMIS Health 2 Flammability 4 Instability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.

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Methods for Containment		Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13)							
Methods for Cleaning Up		Pick up and transfer to properly labelled containers.							
Neutralizing Agent		Not applicable							
7. HANDLING AND STORAGE									
Handling		Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.							
Storage		Keep away from heat and sources of ignition.							
Storage Temperature		Minimum		35°F / 2°C		Maximum		120°F / 49°C	
Storage Conditions		Indoor		X		Outdoor		Heated Refrigerated	
8. EXPOSURE CONTROLS / PERSONAL PROTECTION									
Exposure Guidelines									
Component		ACGIH TLV		OSHA PEL		NIOSH			
Butane		TWA: 1000 ppm		no data available		TWA: 1900 mg/m ³ TWA: 800 ppm			
Molybdenum disulfide		TWA: 0.5 mg/m ³ TWA: 10 mg/m ³ TWA: 3 mg/m ³		TWA: 15 mg/m ³ TWA: 5 mg/m ³		IDLH: 1000 mg/m ³			
Petroleum naphtha, light aromatic		No data available		no data available		no data available			
Isopropyl alcohol		TWA: 200 ppm STEL: 400 ppm		TWA: 400 ppm TWA: 980 mg/m ³		IDLH: 2000 ppm STEL 500 ppm STEL 1225 mg/m ³ TWA: 980 mg/m ³ TWA: 400 ppm			
Propane		TWA: 1000 ppm		TWA: 1000 ppm TWA: 1800 mg/m ³		IDLH: 2100 ppm TWA: 1800 mg/m ³ TWA: 1000 ppm			
Ethylcellulose		No data available		no data available		no data available			
Pseudocumene		TWA: 25 ppm		no data available		TWA: 125 mg/m ³ TWA: 25 ppm			
Engineering Measures		Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.							
Personal Protective Equipment									
Eye/Face Protection		Safety glasses with side-shields.							
Skin Protection		Impervious gloves.							
Respiratory Protection		Use NIOSH approved respiratory protection.							
General Hygiene Considerations		Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.							
9. PHYSICAL AND CHEMICAL PROPERTIES									
Physical State		Liquid		Viscosity		Slightly Viscous			
Color		Dark gray		Odor		Alcoholic			
Appearance		Opaque		pH		Not applicable			
Specific Gravity		0.817		Bulk Density		6.81			
Evaporation Rate		52.2 (Butyl acetate=1)		Percent Volatile (Volume)		100			
VOC Content (%)		100		Vapor Pressure		1302 mmHg @ 70 °F			
Vapor Density		1.9		Solubility		Dispersible			
Boiling Point/Range		180°F / 82°C							
10. STABILITY AND REACTIVITY									
Chemical Stability		Stable. Hazardous polymerization does not occur .							
Conditions to Avoid		Heat, flames, and sparks.							
Incompatible Products		Bases. Acids. Strong oxidizing agents. Halogenated hydrocarbon. Aldehydes. Ketones.							
Hazardous Decomposition Products		Nitrogen oxides (NOx). Carbon oxides. Sulfur oxides .							
Possibility of Hazardous Reactions		None under normal processing							
11. TOXICOLOGICAL INFORMATION									
Product Information		No information available							
Component Information									
Acute toxicity									
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other				
Butane	no data available	no data available	658 g/m ³ (Rat) 4 h	no data available	no data available				
Molybdenum disulfide	no data available	no data available	2820 mg/m ³ (Rat) 4 h	no data available	no data available				
Petroleum naphtha, light aromatic	8400 mg/kg (Rat)	2000 mg/kg (Rabbit)	3400 ppm (Rat) 4 h 5.2 mg/L (Rat) 4 h	no data available	no data available				
Isopropyl alcohol	4396 mg/kg (Rat)	12800 mg/kg (Rabbit) 12800 mg/kg (Rat)	72.6 mg/L (Rat) 4 h	no data available	no data available				
Propane	no data available	658 mg/kg (Rat)	no data available	no data available	no data available				
Ethylcellulose	5 g/kg (Rat)	5 g/kg (Rabbit)	no data available	no data available	no data available				
Pseudocumene	3400 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m ³ (Rat) 4 h	no data available	no data available				
Chronic Toxicity									
Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects				
Butane	no data available	no data available	no data available	no data available	CNS, liver, heart				
Molybdenum disulfide	no data available	no data available	no data available	no data available	respiratory system, kidneys, eyes,				
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					blood, bones, joints
Petroleum naphtha, light aromatic	no data available	no data available	no data available	no data available	no data available
Isopropyl alcohol	no data available	no data available	no data available	no data available	eyes, skin, respiratory system
Propane	no data available	no data available	no data available	no data available	CNS, liver, heart
Ethylcellulose	no data available	no data available	no data available	no data available	no data available
Pseudocumene	no data available	no data available	no data available	no data available	eyes, skin, respiratory system, CNS, blood
Carcinogenicity					
Component	ACGIH	IARC	NTP	OSHA	Other
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Molybdenum disulfide	A3	not applicable	not applicable	not applicable	not applicable
Petroleum naphtha, light aromatic	not applicable	not applicable	not applicable	not applicable	not applicable
Isopropyl alcohol	not applicable	not applicable	not applicable	not applicable	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Ethylcellulose	not applicable	not applicable	not applicable	not applicable	not applicable
Pseudocumene	not applicable	not applicable	not applicable	not applicable	not applicable
12. ECOLOGICAL INFORMATION					
Product Information					
No information available					
Component Information					
Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Butane	no data available	no data available	no data available	no data available	2.89
Molybdenum disulfide	no data available	no data available	no data available	no data available	N/A
Petroleum naphtha, light aromatic	no data available	LC50= 9.22 mg/L Oncorhynchus mykiss 96 h	no data available	EC50 = 6.14 mg/L 48 h	N/A
Isopropyl alcohol	EC50> 1000 mg/L Scenedesmus subspicatus 72 h EC50> 1000 mg/L Scenedesmus subspicatus 96 h	LC50= 61200 mg/L Pimephales promelas 96 h LC50= 94900 mg/L Pimephales promelas 96 h LC50= 9640 mg/L Pimephales promelas 96 h	EC50 = 35390 mg/L 5 min	EC50 = 13299 mg/L 48 h	0.05
Propane	no data available	no data available	no data available	no data available	2.3
Ethylcellulose	no data available	no data available	no data available	no data available	N/A
Pseudocumene	no data available	LC50= 7.72 mg/L Pimephales promelas 96 h	no data available	EC50 = 6.14 mg/L 48 h	3.63
Persistence and Degradability					
No information available					
Bioaccumulation					
No information available					
Mobility					
No information available					
13. DISPOSAL CONSIDERATIONS					
Product Disposal					
Dispose of as hazardous waste in compliance with local and national regulations					
Container Disposal					
Contents under pressure Do not puncture. Empty containers should be taken for local recycling, recovery or waste disposal					
14. TRANSPORT INFORMATION					
DOT					
DOT					
Proper Shipping Name					
Consumer commodity					
Hazard Class					
ORM-D					
Description					
Consumer commodity ,ORM-D,					
TDG					
Proper shipping name					
Aerosols					
Hazard Class					
2.1					
UN-No					
UN1950					
Description					
AEROSOLS,2.1,UN1950 LTD. QTY.					
ICAO					
UN-No					
UN1950					
Proper Shipping Name					
Aerosols					
Hazard Class					
2.1					
Shipping Description					
Aerosols,UN1950 2.1 LTD. QTY.					
IATA					
UN-No					
UN1950					
Proper Shipping Name					
Aerosols, flammable					
Hazard Class					
2.1					
ERG Code					
10L					
Shipping Description					
UN1950,Aerosols, flammable,2.1 LTD. QTY.					
IMDG/IMO					
Proper Shipping Name					
Aerosols					
Hazard Class					
2					
UN-No					
UN1950					
EmS No.					
F-D, S-U					
Shipping Description					
UN1950, Aerosols,2.1 LTD QTY.					
15. REGULATORY INFORMATION					
Inventories					
TSCA					
Complies					
DSL					
Complies					
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U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Isopropyl alcohol	67-63-0	55-60	1.0
Pseudocumene	95-63-6	1-5	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Butane	Not applicable	Not applicable
Molybdenum disulfide	Not applicable	Not applicable
Petroleum naphtha, light aromatic	Not applicable	Not applicable
Isopropyl alcohol	Not applicable	Not applicable
Propane	Not applicable	Not applicable
Ethylcellulose	Not applicable	Not applicable
Pseudocumene	Not applicable	Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

A Compressed gases, B5 Flammable aerosol, D2B Toxic materials .



16. OTHER INFORMATION

Prepared By	Mike McDowell
Supersedes Date	08/04/2005
Issuing Date	07/25/2008
Reason for Revision	No information available
Glossary	No information available
List of References	No information available

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