

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DRI-LUBE PLUS AEROSOL
Recommended Use Lubricant
Information on Manufacturer
 CERTIFIED LABS, DIV. OF NCH CORP.
 BOX 152170
 IRVING, TEXAS 75015

Product Code 5438
Chemical Nature Alcoholic solution
Emergency Telephone Number
 CHEMTREC® 800-424-9300

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
Potential Health Effects
Principle Route of Exposure
Primary Routes of Entry
Acute Effects
 Eyes
 Skin
 Inhalation
 Ingestion

Physical State Liquid

Odor Alcoholic

Inhalation, Skin contact, Eye contact.
 Inhalation, Skin Absorption.
 Causes eye irritation.
 May cause skin irritation. The product may be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.
 May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause headache and dizziness.
 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.
 Ingestion may cause lowering of blood pressure. Liver and kidney injuries may occur.
 Blood, Central nervous system, Heart, Liver, Lungs, and Kidneys., Skin, Eyes.
 Blood disorders. Cardiovascular. Kidney disorders. Skin disorders. Respiratory disorders. Neurological disorders.
 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** Set a 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.

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
Storage Conditions	Indoor	X	Outdoor
			Heated
			120°F / 49°C
			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
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Component Information

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	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,

Petroleum naphtha, light aromatic	no data available	no data available	no data available	no data available	blood, bones, joints
Isopropyl alcohol	no data available	no data available	no data available	no data available	no data available
Propane	no data available	no data available	no data available	no data available	eyes, skin, respiratory system
Ethylcellulose	no data available	no data available	no data available	no data available	CNS, liver, heart
Pseudocumene	no data available	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**

Proper Shipping Name
Hazard Class
Description

DOT
Consumer commodity
ORM-D
Consumer commodity ,ORM-D,

TDG

Proper shipping name
Hazard Class
UN-No
Description

Aerosols
2.1
UN1950
AEROSOLS,2.1,UN1950 LTD. QTY.

ICAO

UN-No
Proper Shipping Name
Hazard Class
Shipping Description

UN1950
Aerosols
2.1
Aerosols,UN1950 2.1 LTD. QTY.

IATA

UN-No
Proper Shipping Name
Hazard Class
ERG Code
Shipping Description

UN1950
Aerosols, flammable
2.1
10L
UN1950,Aerosols, flammable,2.1 LTD. QTY.

IMDG/IMO

Proper Shipping Name
Hazard Class
UN-No
EmS No.
Shipping Description

Aerosols
2
UN1950
F-D, S-U
UN1950, Aerosols,2.1 LTD QTY.

15. REGULATORY INFORMATION**Inventories**

TSCA
DSL

Complies
Complies

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 Title 40 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
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 Reason for Revision No information available
 Glossary No information available
 List of References No information available

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