Material Safety Data Sheet: DRI-LUBE PLUS AEROSOL

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DRI-LUBE PLUS AEROSOL

Recommended Use Lubricant

Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.

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

Physical State Liquid

Odor Alcoholic

Potential Health Effects

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.

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

Potential Environmental Effects
See Section 12 for additional Ecological information

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>106-97-8</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>1317-33-5</td>
</tr>
<tr>
<td>Petroleum naphtha, light aromatic</td>
<td>64742-95-6</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
</tr>
<tr>
<td>Ethylcellulose</td>
<td>9004-57-3</td>
</tr>
<tr>
<td>Pseudocumene</td>
<td>95-63-6</td>
</tr>
</tbody>
</table>

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

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.

Page 1 / 4
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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component | ACGIH TLV | OSHA PEL | NIOSH
--- | --- | --- | ---
Butane | TWA: 1000 ppm | no data available | TWA: 1900 mg/m³
Molybdenum disulfide | TWA: 0.5 mg/m³ | TWA: 15 mg/m³ | IDLH: 1000 mg/m³
Petroleum naphtha, light aromatic | No data available | no data available | no data available
Isopropyl alcohol | TWA: 250 ppm | TWA: 400 ppm | IDLH: 2000 ppm
Propane | TWA: 1000 ppm | TWA: 1000 ppm | IDLH: 2100 ppm
Ethylcellulose | No data available | no data available | no data available
Pseudocumene | TWA: 25 ppm | no data available | TWA: 125 mg/m³

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

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Viscosity</th>
<th>Color</th>
<th>Odor</th>
<th>pH</th>
<th>Bulk Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Slightly Viscous</td>
<td>Dark gray</td>
<td>Alcoholic</td>
<td>Not applicable</td>
<td>6.81</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability
Stable. Hazardous polymerization does not occur.

Conditions to Avoid
Heat, flames, and sparks.

Incompatible Products

Hazardous Decomposition Products

Possibility of Hazardous Reactions
None under normal processing

11. TOXICOLOGICAL INFORMATION

Component Information
No information available

Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
<th>Dermal Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>no data available</td>
<td>no data available</td>
<td>658 g/m³ ( Rat )</td>
<td>4 h</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>no data available</td>
<td>no data available</td>
<td>2820 mg/m³ ( Rat )</td>
<td>4 h</td>
</tr>
<tr>
<td>Petroleum naphtha, light aromatic</td>
<td>8400 mg/kg ( Rat )</td>
<td>2000 mg/kg ( Rabbit )</td>
<td>3400 ppm ( Rat )</td>
<td>4 h</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>4396 mg/kg ( Rat )</td>
<td>12800 mg/kg ( Rabbit )</td>
<td>72.6 mg/L ( Rat )</td>
<td>4 h</td>
</tr>
<tr>
<td>Propane</td>
<td>no data available</td>
<td>658 mg/kg ( Rat )</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Ethylcellulose</td>
<td>5 g/kg ( Rat )</td>
<td>5 g/kg ( Rabbit )</td>
<td>no data available</td>
<td>no data available</td>
</tr>
<tr>
<td>Pseudocumene</td>
<td>3400 mg/kg ( Rat )</td>
<td>3160 mg/kg ( Rabbit )</td>
<td>18 g/m³ ( Rat )</td>
<td>4 h</td>
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</table>

Chronic Toxicity

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<thead>
<tr>
<th>Component</th>
<th>Mutagenicity</th>
<th>Sensitization</th>
<th>Developmental Toxicity</th>
<th>Reproductive Toxicity</th>
<th>Target Organ Effects</th>
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<tbody>
<tr>
<td>Butane</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>CNS, liver, heart</td>
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<tr>
<td>Molybdenum disulfide</td>
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<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>Respiratory system, kidneys, eyes</td>
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<tr>
<td>Component</td>
<td>ACGIH</td>
<td>IARC</td>
<td>NTP</td>
<td>OSHA</td>
<td>Other</td>
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<td>---------------------------</td>
<td>-------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-------</td>
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<tr>
<td>Butane</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Petroleum naphtha, light aromatic</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Propane</td>
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<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
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<tr>
<td>Ethylcellulose</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
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<tr>
<td>Pseudocumene</td>
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<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
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</tbody>
</table>

### 12. ECOLOGICAL INFORMATION

#### Product Information
- **No information available**

#### Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
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<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>2.89</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>N/A</td>
</tr>
<tr>
<td>Petroleum naphtha, light aromatic</td>
<td>LC50= 9.22 mg/L Oncorhynchus mykiss 96 h</td>
<td>no data available</td>
<td>no data available</td>
<td>EC50 = 6.14 mg/L 48 h</td>
<td>N/A</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>EC50= 1000 mg/L Scenedesmus subspicatus 72 h</td>
<td>LC50= 61200 mg/L Pimephales promelas 96 h</td>
<td>no data available</td>
<td>no data available</td>
<td>0.05</td>
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<tr>
<td>Propane</td>
<td>no data available</td>
<td>LC50= 7.72 mg/L Pimephales promelas 96 h</td>
<td>no data available</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Ethylcellulose</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
<td>2.3</td>
</tr>
<tr>
<td>Pseudocumene</td>
<td>no data available</td>
<td>LC50= 7.72 mg/L Pimephales promelas 96 h</td>
<td>no data available</td>
<td>EC50 = 6.14 mg/L 48 h</td>
<td>3.63</td>
</tr>
</tbody>
</table>

#### 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**: 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.

#### DATA
- **UN-No**: UN1950
- **Proper Shipping Name**: Aerosols, flammable
- **Hazard Class**: 2.1
- **ERG Code**: 1.0L
- **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
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:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>55-60</td>
<td>1.0</td>
</tr>
<tr>
<td>Pseudocumene</td>
<td>95-63-6</td>
<td>1-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Categorization

<table>
<thead>
<tr>
<th>Acute Health Hazard</th>
<th>Chronic Health Hazard</th>
<th>Fire Hazard</th>
<th>Sudden Release of Pressure Hazard</th>
<th>Reactive Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA EHS RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>Not applicable</td>
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<tr>
<td>Petroleum naphtha, light aromatic</td>
<td>Not applicable</td>
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<tr>
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<td>Not applicable</td>
</tr>
<tr>
<td>Propane</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Ethylcellulose</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Pseudocumene</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

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
Supercedes 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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