

1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** AEROLEX PLUS AEROSOL  
**Recommended Use** Lubricant  
**Information on Manufacturer**  
 CHEMSEARCH DIV. OF NCH CORP.  
 BOX 152170  
 IRVING, TX 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

**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.

**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.

<b>Methods for Containment</b>	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)
<b>Methods for Cleaning Up</b>	Pick up and transfer to properly labelled containers.
<b>Neutralizing Agent</b>	Not applicable

## 7. HANDLING AND STORAGE

<b>Handling</b>	Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.		
<b>Storage</b>	Keep away from heat and sources of ignition.		
<b>Storage Temperature</b>	<b>Minimum</b>	35°F / 2°C	<b>Maximum</b>
<b>Storage Conditions</b>	<b>Indoor</b>	X	<b>Outdoor</b>
			<b>Heated</b>
			120°F / 49°C
			<b>Refrigerated</b>

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Butane	TWA: 1000 ppm	no data available	TWA: 1900 mg/m <sup>3</sup> TWA: 800 ppm
Molybdenum disulfide	TWA: 0.5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup>
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 <sup>3</sup>	IDLH: 2000 ppm STEL 500 ppm STEL 1225 mg/m <sup>3</sup> TWA: 980 mg/m <sup>3</sup> TWA: 400 ppm
Propane	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1800 mg/m <sup>3</sup> TWA: 1000 ppm
Ethylcellulose	No data available	no data available	no data available
Pseudocumene	TWA: 25 ppm	no data available	TWA: 125 mg/m <sup>3</sup> TWA: 25 ppm

<b>Engineering Measures</b>	Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin Protection</b>	Impervious gloves.
<b>Respiratory Protection</b>	Use NIOSH approved respiratory protection.
<b>General Hygiene Considerations</b>	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

<b>Physical State</b>	Liquid	<b>Viscosity</b>	Slightly Viscous
<b>Color</b>	Dark gray	<b>Odor</b>	Alcoholic
<b>Appearance</b>	Opaque	<b>pH</b>	Not applicable
<b>Specific Gravity</b>	0.817	<b>Bulk Density</b>	6.81
<b>Evaporation Rate</b>	52.2 (Butyl acetate=1)	<b>Percent Volatile (Volume)</b>	100
<b>VOC Content (%)</b>	100	<b>Vapor Pressure</b>	1302 mmHg @ 70 °F
<b>Vapor Density</b>	1.9	<b>Solubility</b>	Dispersible
<b>Boiling Point/Range</b>	180°F / 82°C		

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable. Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Heat, flames, and sparks.
<b>Incompatible Products</b>	Bases. Acids. Strong oxidizing agents. Halogenated hydrocarbon. Aldehydes. Ketones.
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NOx). Carbon oxides. Sulfur oxides.
<b>Possibility of Hazardous Reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

**Product Information** No Information available

## Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Butane	no data available	no data available	658 g/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available
Molybdenum disulfide	no data available	no data available	2820 mg/m <sup>3</sup> ( 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 <sup>3</sup> ( 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,

					blood, bones, joints no data available
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 <i>Oncorhynchus mykiss</i> 96 h	no data available	EC50 = 6.14 mg/L 48 h	N/A
Isopropyl alcohol	EC50> 1000 mg/L <i>Scenedesmus subspicatus</i> 72 h EC50> 1000 mg/L <i>Scenedesmus subspicatus</i> 96 h	LC50= 81200 mg/L <i>Pimephales promelas</i> 96 h LC50= 94900 mg/L <i>Pimephales promelas</i> 96 h LC50= 9640 mg/L <i>Pimephales promelas</i> 96 h	EC50 = 36390 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 <i>Pimephales promelas</i> 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** 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

**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 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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