





SDS # : 083680

## LIQUID DAMCHEX

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### DANGER

#### Hazard Statements

Causes skin irritation  
 Causes serious eye irritation  
 May damage fertility or the unborn child  
 May cause respiratory irritation  
 May cause drowsiness or dizziness

#### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
 Wear eye/face protection  
 Avoid breathing dust/fume/gas/mist/vapours/ spray  
 Use only outdoors or in a well-ventilated area  
 Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required

#### Precautionary Statements - Response

Specific treatment (see 4 on this label)  
 IF exposed or concerned: Get medical advice/attention

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

#### Skin

IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

#### Precautionary Statements - Disposal

Dispose of contents/ container to an approved waste disposal plant

#### Unknown Acute Toxicity

No information available

#### Hazards not otherwise classified (HNOC)

None known

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### Other information

#### Physical-Chemical Properties

Contaminated surfaces will be extremely slippery.

#### Environmental properties

Should not be released into the environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Liquid polysulphide polymer with thiol end groups (MW > 1800)	68611-50-7	70-80
N-Methyl Pyrrolidone	872-50-4	15-25

### 4. FIRST AID MEASURES

#### First aid measures for different exposure routes

#### General advice

Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance. If symptoms persist, call a physician. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

#### Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

#### Skin contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. Immediate medical attention is not required. Remove contaminated clothing and shoes. Wash off with soap and water.

#### Inhalation

Immediate medical attention is required. Move to fresh air. If not breathing, give artificial respiration. Move to fresh air in case of accidental inhalation of vapors. Artificial respiration and/or oxygen may be necessary. Consult a physician. Immediate medical attention is not required. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

#### Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Drink plenty of water. Clean mouth with water. Do not induce vomiting without medical advice. Consult a physician. If swallowed, do not induce vomiting - seek medical advice.

#### Protection of First-aiders

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

#### Most important symptoms/effects, acute and delayed

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<b>Skin contact</b>	Skin corrosion/irritation.
<b>Eye contact</b>	Risk of serious damage to eyes.
<b>Inhalation</b>	Avoid breathing vapors or mists. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
<b>Ingestion</b>	Toxic if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts.
<b>Symptoms</b>	Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b><u>Suitable Extinguishing Media</u></b>	Carbon dioxide (CO <sub>2</sub> ). ABC powder. Water spray or fog. Alcohol-resistant foam. Cool containers / tanks with water spray. Use: Dry chemical. Water spray. Foam.
<b>Uniform Fire Code</b>	Combustible Liquid: III-A Irritant: Liquid
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b><u>Special Hazard</u></b>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Thermal decomposition can lead to release of irritating gases and vapors; Sulfur oxides. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance.
<b><u>Explosion Data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.
<b><u>Protective Equipment and Precautions for Firefighters</u></b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

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### General Information

Use personal protective equipment. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Heat, flames and sparks. Ensure adequate ventilation. Evacuate personnel to safe areas. Pay attention to flashback. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery.

### Other information

See Section 12 for additional information.

### Environmental precautions

### General Information

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

### Methods and materials for containment and cleaning up

### Methods for cleaning up

Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

### Advice on safe handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Prevent the formation of vapors, mists and aerosols. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. There is a hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulation of these: they are to be disposed off safely after use. Avoid static electricity build up with connection to earth. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition. When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist.

### Prevention of fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems). OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION). Do not use compressed air for filling, discharging or handling. Empty containers may contain flammable or explosive vapors.

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### Hygiene measures

Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas. Do not wash off with: Fuel. Solvent. Abrasive. Avoid extended and repeated contact with the skin as this may cause skin conditions, which may also be aggravated by minor injuries or by contact with soiled clothing. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

### Conditions for safe storage, including any incompatibilities

#### Technical measures/Storage conditions

Keep away from direct sunlight.

#### Materials to Avoid

Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

The product does not contain any hazardous materials with occupational exposure limits established.

### Biological standards

Chemical Name	ACGIH
N-Methyl Pyrrolidone 872-50-4	5-Hydroxy-N-methyl-2-pyrrolidone in urine 100 mg/L -end of shift

### Exposure controls

#### Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

### Individual protection measures, such as personal protective equipment

#### General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

#### Eye/Face Protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

#### Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

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### Hand Protection

Protective gloves. Butyl rubber. Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

### Hygiene measures

Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas. Do not wash off with: Fuel. Solvent. Abrasive. Avoid extended and repeated contact with the skin as this may cause skin conditions, which may also be aggravated by minor injuries or by contact with soiled clothing. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

Appearance	Very viscous
Color	dark amber
Physical State @20°C	liquid
Odor	Characteristic
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point	95 °C 203 °F		ASTM D 93 ASTM D 93.
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper	-	No information available	
Lower	-	No information available	

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Vapor Pressure		No information available
Vapor density		No information available
Relative density	> 1	@ 25 °C
Density	> 1 g/cm <sup>3</sup>	@ 25 °C
Water solubility		slightly soluble
Solubility in other solvents		Soluble in many common organic solvents
logPow		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		Not applicable
Explosive properties	Not explosive	
Oxidizing Properties	No information available	
Possibility of hazardous reactions	See section 10	
<u>Other information</u>		

Freezing Point No information available

Note • Please refer to Technical Data Sheet for further information

### 10. STABILITY AND REACTIVITY

<u>Reactivity</u>	No dangerous reaction known under conditions of normal use.
<u>Chemical stability</u>	Stable under recommended storage conditions.
<u>Possibility of hazardous reactions</u>	Hazardous polymerization does not occur. None under normal processing.
<u>Conditions to Avoid</u>	Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Heating in air. Strong oxidizing agents. Heat, flames and sparks.
<u>Incompatible Materials</u>	Strong oxidizing agents.
<u>Hazardous Decomposition Products</u>	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Sulfur oxides, Hydrogen sulphide.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

#### Information on likely routes of exposure

Principle Routes of Exposure Inhalation, Ingestion, Eye contact, Skin contact.

ATEmix (oral)	16600 mg/kg
ATEmix (dermal)	12331 mg/kg

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### Inhalation

ATEmix (inhalation-dust/mist) 17.6 mg/l  
ATEmix (inhalation-vapor) 125.6 mg/l

### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Liquid polysulphide polymer with thiol end groups (MW > 1800) 68611-50-7	LD50 > 5000 mg/kg (Rat)	LD50 > 7800 mg/kg (Rat)	
N-Methyl Pyrrolidone 872-50-4	LD50 4150 mg/kg (Rat)	LD50 > 5000 mg/kg (Rat)	LC50 (4h) > 5.1 mg/l (Rat)

### Information on toxicological effects

#### Symptoms

Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate.

#### Skin contact

Skin corrosion/irritation.

#### Eye contact

Risk of serious damage to eyes.

#### Inhalation

Avoid breathing vapors or mists. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

#### Ingestion

Toxic if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Sensitization

Not classified as a sensitizer. May cause sensitization by inhalation and skin contact.

#### Carcinogenicity

This product is not classified carcinogenic. May cause cancer.

#### Mutagenicity

This product is not classified as mutagenic.

#### Reproductive toxicity

May cause birth defects. May cause harm to the unborn child.

#### Other adverse effects

Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).

#### Aspiration Hazard

Not classified.

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Harmful to aquatic life  
Harmful to aquatic life with long lasting effects

#### Acute aquatic toxicity - Product Information

No experimental data available

#### Acute aquatic toxicity - Component Information

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Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Liquid polysulphide polymer with thiol end groups (MW > 1800) 68611-50-7		LC50 (96h) > 1000 mg/l (Leuciscus idus)	EC50 (48h) 20 mg/l (Daphnia magna - DIN EN ISO 6341-L40)	
N-Methyl Pyrrolidone 872-50-4	EC50 (72h) > 500 mg/l (Desmodesmus subspicatus - static)	LC50 (96h) > 500 mg/l (Oncorhynchus mykiss - static)		

**Chronic aquatic toxicity - Product Information**

No experimental data available

**Chronic aquatic toxicity - Component Information**

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
N-Methyl Pyrrolidone 872-50-4	NOEC (72h) 125 mg/l (Desmodesmus subspicatus - static)	NOEC (21d) 12.5 mg/l (Daphnia magna - semi static - OECD 211)		

**Effects on terrestrial organisms** No experimental data available .**Persistence and degradability****General Information** No information available.**Bioaccumulative potential****Product Information** No information available.**logPow** No information available**Component Information**

Chemical Name	log Pow
N-Methyl Pyrrolidone 872-50-4	- 0.46

**Mobility**

**Soil** Not Determined  
**Air** No information available  
**Water** May exhibit slight solubility in water

**Other adverse effects****General Information** No information available**13. DISPOSAL CONSIDERATIONS**

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### Waste treatment

#### **Waste Disposal Methods**

Should not be released into the environment. Dispose of in accordance with local regulations.

#### **Contaminated packaging**

Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.

California Hazardous Waste Codes 221

## 14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO/IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:  
 U.S.A. (TSCA)  
 Canada (DSL/NDSL)  
 Australia (AICS)  
 Korea (KECL)  
 China (IECSC)  
 Japan (ENCS)  
 Philippines (PICCS)  
 New Zealand (NZIoC)

### U.S. Federal Regulations

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**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:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
N-Methyl Pyrrolidone	872-50-4	25	1.0

**SARA 311/312 Hazard Categories**

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

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	Weight %	California Prop. 65
N-Methyl Pyrrolidone - 872-50-4	15-25	Developmental

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
N-Methyl Pyrrolidone 872-50-4	X	X	X	

**16. OTHER INFORMATION**

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<u>NFPA</u>	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection X

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

Revision Date: 2015-11-20  
 Revision Note: \*\*\* Indicates updated section  
 Abbreviations, acronyms

### Legend

Section 8  
 ACGIH - American Conference of Governmental Industrial Hygienists  
 OSHA - Occupational Safety and Health Administration  
 NIOSH - National Institute for Occupational Safety and Health  
 TLV - Threshold Limit Values  
 PEL - Permissible Exposure Limits  
 IDHL - Immediately Dangerous to Life or Health concentrations  
 TWA - Time Weight Average  
 STEL - Short Term Exposure Limits  
 S\* - Skin notation  
 TSCA - Toxic Substance Control Act

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet

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