

# SAFETY DATA SHEET

## 1. Identification

Product identifier	RENOFORM 821 L
Other means of identification	No data available.
Recommended use:	Metalworking fluid
Restrictions on use:	Industrial use only

### Manufacturer/Importer/Distributor Information

#### Manufacturer

Company Name: FUCHS LUBRICANTS CANADA LTD.  
Address: 405 Dobbie Drive  
Cambridge, ON N1T 1S8  
Telephone: 519-622-2040  
Fax: 519-622-2220  
Contact Person: Technical Services Department

**Emergency telephone number:** 519-622-2040 (Bus. hrs) CANUTEC 1-888-226-8832 (24 hrs)

## 2. Hazard identification

### Hazard Classification

#### Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1

#### Unknown toxicity - Health

Acute toxicity, oral	17.81 %
Acute toxicity, dermal	18.81 %
Acute toxicity, inhalation, vapor	46.74 %
Acute toxicity, inhalation, dust or mist	49.34 %

% of the mixture consists of an ingredient or ingredients of unknown acute toxicity

### Label Elements

#### Hazard Symbol:



<b>Signal Word:</b>	Danger
<b>Hazard Statement:</b>	Causes skin irritation. Causes serious eye damage.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.
<b>Response:</b>	IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see in product SDS). Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Other hazards which do not result in GHS classification:</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Monoethanolamine oleate	Monoethanolamine oleate,	2272-11-9	10 - 30%
Triethanolamine	Triethanolamine,	102-71-6	7 - 13%
Monoethanolamine	Monoethanolamine,	141-43-5	1 - 5%
Ethoxylated alcohol		68154-99-4	1 - 5%
Hexylene glycol	Hexylene glycol,	107-41-5	0.1 - 1%
Triazine compound	Triazine compound,	4719-04-4	0.1 - 1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Ingestion:</b>	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
<b>Inhalation:</b>	Move to fresh air. Call a POISON CENTER/doctor if you feel unwell.
<b>Skin Contact:</b>	Remove contaminated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

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

**Symptoms:** No data available.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Symptoms may be delayed.

## 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Water spray, fog, CO<sub>2</sub>, dry chemical, or regular foam. Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** Heat may cause the containers to explode. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

## 7. Handling and storage

- Precautions for safe handling:** End-users should follow industry best practices for handling and using this product.
- Guidance may be found using the current version of ASTM Standard E1497-05: Standard Practice for Selection and Safe Use of Water-Miscible and Straight Oil Metal Removal Fluids Do not get in eyes. Wash hands thoroughly after handling. Avoid contact with skin. Contains amines. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. Do not get in eyes. Wash hands thoroughly after handling. Use caution when adding this material to water. Add material slowly when mixing with water. Do not add water to the material; instead, add the material to the water. Avoid contact with skin.
- Conditions for safe storage, including any incompatibilities:** Store in original tightly closed container. Avoid contact with oxidizing agents. Store away from incompatible materials.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Triethanolamine	TWA	5 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Triethanolamine	TWA	5 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Triethanolamine	TWA	0.5 ppm 3.1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Triethanolamine	8 HR ACL	5 mg/m <sup>3</sup>	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	10 mg/m <sup>3</sup>	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Triethanolamine	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Triethanolamine	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (03 2012)
Monoethanolamine	TWA	3 ppm 7.5 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	STEL	6 ppm 15 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Monoethanolamine	STEL	6 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
	TWA	3 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Monoethanolamine	STEL	6 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	TWA	3 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)

Monoethanolamine	8 HR ACL	3 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	6 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Monoethanolamine	STEL	6 ppm 15 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
	TWA	3 ppm 7.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Monoethanolamine	TWA	3 ppm	US. ACGIH Threshold Limit Values (03 2012)
	STEL	6 ppm	US. ACGIH Threshold Limit Values (03 2012)
Hexylene glycol	CEILING	25 ppm 121 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Hexylene glycol	CEILING	25 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Hexylene glycol	CEILING	25 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2012)
Hexylene glycol	CEV	25 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Hexylene glycol	Ceiling	25 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Hexylene glycol	CEILING	25 ppm 121 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)
Hexylene glycol - Vapor fraction	TWA	25 ppm	US. ACGIH Threshold Limit Values (03 2017)
Hexylene glycol - Aerosol, inhalable.	STEL	10 mg/m3	US. ACGIH Threshold Limit Values (03 2017)
Hexylene glycol - Vapor fraction	STEL	50 ppm	US. ACGIH Threshold Limit Values (03 2017)

**Appropriate Engineering Controls**

No data available.

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

**General information:** Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:** No data available.

**Other:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from supervisor on the company's respiratory protection standards.

**Hygiene measures:**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## 9. Physical and chemical properties

### Appearance

**Physical state:**

liquid

**Form:**

No data available.

**Color:**

Amber

**Odor:**

Mild

**Odor threshold:**

No data available.

**pH:**

9.4

**Melting point/freezing point:**

No data available.

**Initial boiling point and boiling range:**

No data available.

**Flash Point:**

Not applicable

**Evaporation rate:**

No data available.

**Flammability (solid, gas):**

No data available.

**Upper/lower limit on flammability or explosive limits**

**Flammability limit - upper (%):**

No data available.

**Flammability limit - lower (%):**

No data available.

**Explosive limit - upper (%):**

No data available.

**Explosive limit - lower (%):**

No data available.

**Vapor pressure:**

No data available.

**Vapor density:**

No data available.

**Density:**

No data available.

**Relative density:**

1.045

**Solubility(ies)**

**Solubility in water:**

Soluble

**Solubility (other):**

No data available.

**Partition coefficient (n-octanol/water):**

No data available.

**Auto-ignition temperature:**

No data available.

**Decomposition temperature:**

No data available.

**Viscosity:**

No data available.

## 10. Stability and reactivity

**Reactivity:**

Not reactive during normal use.

**Chemical Stability:**

Material is stable under normal conditions.

**Possibility of hazardous reactions:**

None under normal conditions. None under normal conditions.

<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	No data available.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	Harmful if inhaled.
<b>Skin Contact:</b>	Causes severe skin burns.
<b>Eye contact:</b>	Causes serious eye damage.
<b>Ingestion:</b>	Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	ATEmix: > 5000 mg/kg
<b>Dermal</b>	
<b>Product:</b>	ATEmix: > 5000 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	ATEmix: > 20 mg/l Vapour

#### Delayed and immediate effects, including chronic effects from short- and long-term exposure

<b>Product:</b>	No data available.
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#### Skin Corrosion/Irritation

<b>Product:</b>	No data available.
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#### Serious Eye Damage/Eye Irritation

<b>Product:</b>	No data available.
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#### Respiratory or Skin Sensitization

<b>Product:</b>	No data available.
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## **Carcinogenicity**

**Product:** No data available.

## **IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

## **US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

## **ACGIH Carcinogen List:**

No carcinogenic components identified

## **Germ Cell Mutagenicity**

### **In vitro**

**Product:** No data available.

### **In vivo**

**Product:** No data available.

## **Reproductive toxicity**

**Product:** No data available.

## **Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

## **Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

## **Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

## **12. Ecological information**

### **Ecotoxicity:**

#### **Acute hazards to the aquatic environment:**

##### **Fish**

**Product:** No data available.

##### **Aquatic Invertebrates**

**Product:** No data available.

#### **Chronic hazards to the aquatic environment:**



#### **Fish**

**Product:** No data available.

#### **Aquatic Invertebrates**

**Product:** No data available.

#### **Toxicity to Aquatic Plants**

**Product:** No data available.

#### **Persistence and Degradability**

##### **Biodegradation**

**Product:** No data available.

##### **BOD/COD Ratio**

**Product:** No data available.

#### **Bioaccumulative potential**

##### **Bioconcentration Factor (BCF)**

**Product:** No data available.

##### **Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

##### **Mobility in soil:**

No data available.

##### **Other adverse effects:**

No data available.

### **13. Disposal considerations**

#### **Disposal instructions:**

Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. It is the responsibility of the product user or owner to determine at the time of disposal, which waste regulations must be applied.

#### **Contaminated Packaging:**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

### **14. Transport information**

#### **TDG**

Not regulated.

#### **IMDG**

Not regulated.

#### **IATA**

Not regulated.

### **15. Regulatory information**

**Canada Federal Regulations**

**List of Toxic Substances (CEPA, Schedule 1)**

Not Regulated

**Export Control List (CEPA 1999, Schedule 3)**

Not Regulated

**National Pollutant Release Inventory (NPRI)**

**Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements**

NPRI PT5 Not Regulated

**Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)**

NPRI Not Regulated

**Greenhouse Gases**

Not Regulated

**16. Other information, including date of preparation or last revision**

**Issue Date:** 06/27/2019

**Revision Date:** 06/27/2019

**Version #:** 1.2

**Further Information:** No data available.

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.