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# SAFETY DATA SHEET

## 1. Identification

**Product name** RENOFORM FR 1310 C

**Other means of identification** No data available.

**Recommended use:** Metalworking fluid

**Restrictions on use:** Industrial use only

### Manufacturer/Importer/Supplier/Distributor Information

#### Manufacturer

Company Name: Fuchs Lubricants Co.  
Address: 17050 Lathrop Avenue  
Harvey, Illinois 60426  
Telephone: 708-333-8900  
Fax: 708-333-9180

Contact Person: EHS Department  
E-mail: msds@fuchs.com

**Emergency telephone number:** 708-333-8900 (Bus. hrs) 800-255-3924 (24 hrs)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

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

### Label Elements

#### Hazard Symbol:



**Signal Word:** Warning

**Hazard Statement:** Causes skin irritation.  
Causes serious eye irritation.

#### Precautionary



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## Statement

**Prevention:** Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** 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. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see the specific response guidance provided herein). Take off contaminated clothing.

**Other hazards which do not result in GHS classification:** None.

## Unknown toxicity Health

Acute toxicity, inhalation, dust or mist	24.5563 %
Acute toxicity, inhalation, vapor	25.4591 %
Acute toxicity, dermal	18.9701 %
Acute toxicity, oral	16.6817 %

## 3. Composition/information on ingredients

### Hazardous Component(s):

Chemical name	CAS-No.	Concentration
Triethanolamine	102-71-6	5 - 10%
(C12-C15) Alkyl alcohol, ethoxylated, phosphate	68071-35-2	1 - 5%
Imidazoline compound	Confidential	0.1 - 1%

Specific chemical identities and/or exact percentages have been withheld as trade secrets.

## 4. First-aid measures

**Ingestion:** Call a Poison Center or doctor if you feel unwell. Rinse mouth.

**Inhalation:** Move to fresh air. Call a Poison Center or doctor if you feel unwell.

**Skin Contact:** 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. Get medical attention.



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## Most important symptoms/effects, acute and delayed

**Symptoms:** No data available.

## Indication of immediate medical attention and special treatment needed

**Treatment:** Get medical attention as appropriate or if symptoms persist.

## 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 pressurize and possibly rupture. 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 appropriate for industrial fires.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment. Do not handle 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 an inert material, then place in a container for safe and proper disposal. 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 and protect against releases into the environment. Remediate as appropriate.

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## 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

Contains amines. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. 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

### Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Triethanolamine	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (03 2012)

**Protective Measures:** Provide easy access to water supply and eye wash facilities. Good general ventilation should be provided. 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.

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

**Eye Protection:** Wear safety glasses with side shields (or goggles).

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

**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. Contaminated work clothing should not be allowed out of the workplace. Discard contaminated footwear that cannot be cleaned. Avoid contact with skin, eyes, and clothing.



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## 9. Physical and chemical properties

### Appearance

**Physical state:**

Liquid

**Form:**

No data available.

**Color:**

Light brown

**Odor:**

Characteristic

**Odor threshold:**

No data available.

**pH:**

No data available.

**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.

**Relative density:**

0.87

**Solubility(ies)**

**Solubility in water:**

Emulsifiable in water

**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:**

97.5 mm<sup>2</sup>/s (40 °C, Measured)

### Other information

**VOC:**

0.01 g/l

## 10. Stability and reactivity

**Reactivity:**

Not reactive during normal use.

**Chemical Stability:**

No data available.

**Possibility of Hazardous  
Reactions:**

None under normal conditions.



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<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>Ingestion:</b>	May be harmful if swallowed.
<b>Inhalation:</b>	Harmful if inhaled.
<b>Skin Contact:</b>	Causes skin irritation.
<b>Eye contact:</b>	Causes serious eye irritation.

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

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

### Information on toxicological effects

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

<b>Oral Product:</b>	Not classified for acute toxicity based on available data.
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<b>Dermal Product:</b>	ATEmix (): > 5000 mg/kg
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<b>Inhalation Product:</b>	Not classified for acute toxicity based on available data.
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<b>Repeated dose toxicity Product:</b>	No data available.
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<b>Skin Corrosion/Irritation Product:</b>	No data available.
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<b>Serious Eye Damage/Eye Irritation Product:</b>	No data available.
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## Respiratory or Skin Sensitization

**Product:** No data available.

## 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

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

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:** Components may cause a risk to the following :  
Liver Kidney

## 12. Ecological information

**General information:** This product has not been evaluated for ecological toxicity or other environmental effects.

## 13. Disposal considerations

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**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

This material is not subject to transport regulations.

## 15. Regulatory information

### US Federal Regulations

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### Hazard categories

Acute (Immediate)

##### SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

### US State Regulations

#### US. California Proposition 65

No component is regulated by CA Prop 65.

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

**Issue Date:** 18.05.2015

**Revision Date:** 27.04.2015

**Version #:** 1.0

**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.



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