

SAFETY DATA SHEET

1. Identification

Product name RENOFORM 453

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: sds@fuchs.com

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

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 3

Health Hazards

Aspiration Hazard Category 1

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Flammable liquid and vapor.
May be fatal if swallowed and enters airways.

**Precautionary
Statements**

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF SWALLOWED: Immediately call a POISON CENTER and/or doctor Do NOT induce vomiting. In case of fire: Use water mist, dry chemical extinguisher, or foam to extinguish.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: 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.

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

Unknown toxicity - Health

Acute toxicity, oral	4.15 %
Acute toxicity, dermal	4.85 %
Acute toxicity, inhalation, vapor	7 %
Acute toxicity, inhalation, dust or mist	100 %

3. Composition/information on ingredients

Hazardous Component(s):

Chemical name	CAS-No.	Concentration
Mineral Spirit	Confidential	50 - 100%
Petroleum distillate	Confidential	1 - 5%

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

4. First-aid measures

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Inhalation: Move to fresh air. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact: Remove contaminated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention. Get medical attention if symptoms occur. Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance. Continue to rinse for at least 15 minutes.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, fog, CO₂, dry chemical, or regular foam. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

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:

Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. Keep unauthorized personnel away. Ensure adequate ventilation. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods and material for containment and cleaning up:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. In case of leakage, eliminate all ignition sources. Dike far ahead of larger spill for later recovery and disposal. Use non-sparking tools.

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 Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not expose to intense heat as product may expand and pressurize container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities:

Store locked up. Store in a well-ventilated place. Store in a cool place. Flammable liquid storage.

8. Exposure controls/personal protection

Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Petroleum distillate - Mist.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Petroleum distillate	PEL	100 ppm 400 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
Petroleum distillate	TWA	100 ppm 400 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)

Protective Measures:

Use explosion-proof ventilation equipment. 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.

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. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	No data available.
Color:	Light brown
Odor:	Mild
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:	54.44 °C (129.99 °F)
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:	0.99
Solubility(ies)	
Solubility in water:	Insoluble
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:	< 10 mm ² /s (40 °C, Measured)
VOC:	95.5 % (Method 24)

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.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	Harmful if swallowed.
Inhalation:	Harmful if inhaled.
Skin Contact:	Prolonged skin contact may cause redness and irritation.
Eye contact:	Eye contact is possible and should be avoided.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	ATEmix (): > 5000 mg/kg

Dermal

Product: ATEmix (): 2000 - 5000 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

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), as amended:

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: May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

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

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

DOT

UN Number:	NA 1993
UN Proper Shipping Name:	Combustible liquid, n.o.s.(Mineral spirits)
Transport Hazard Class(es)	
Class:	CBL
Label(s):	NONE
Packing Group:	III
Marine Pollutant:	No
Special precautions for user:	—

IMDG

UN Number:	UN 1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(Mineral spirits)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	III
Marine Pollutant:	Not regulated.
Special precautions for user:	—

IATA

UN Number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(Mineral spirits)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Packing Group:	III
Environmental Hazards	Not regulated.

Special precautions for user: —
 Other information
 Passenger and cargo aircraft: Allowed.
 Cargo aircraft only: Allowed.

15. Regulatory information

US Federal Regulations

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids)

Aspiration Hazard

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

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

Issue Date: 13.02.2020

Revision Date: 13.02.2020

Version #: 1.3

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.