

SAFETY DATA SHEET

1. Identification

| | |
|--------------------------------------|---------------------|
| Product name | RENOFORM DB 4306 |
| 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 P.O. Box 909
Cambridge, ON N1R 5X9
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(s) identification

Hazard Classification

Health Hazards

Toxic to reproduction

Effects on or via lactation

Unknown toxicity - Health

| | |
|---|---------|
| Acute toxicity, oral | 1.14 % |
| Acute toxicity, dermal | 19.62 % |
| Acute toxicity, inhalation, vapor | 99.7 % |
| Acute toxicity, inhalation, dust or mist | 99.9 % |

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: May cause harm to breast-fed children.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not breathe

dust/fume/gas/mist/vapors/spray. Avoid contact during pregnancy and while nursing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF exposed or concerned: Get medical advice/attention.

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

3. Composition/information on ingredients

Mixtures

| Chemical Identity | Common name and synonyms | CAS number | Content in percent (%)* |
|--|--------------------------|------------|-------------------------|
| Distillates (petroleum), hydrotreated heavy naphthenic | Mineral oil, | 64742-52-5 | 60 - 100% |
| Alkanes, C14-C16, chloro | | 63449-39-8 | 10 - 20% |
| Soybean oil, epoxidized | Soybean oil, epoxidized, | 8013-07-8 | 0.1 - 1% |
| Barium compound | Barium compound, | 93820-55-4 | 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

Ingestion: Rinse mouth thoroughly. Call a POISON CENTRE/doctor/ if you feel unwell. Do NOT induce vomiting.

Inhalation: Move to fresh air. Call a POISON CENTRE/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.

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.

Hazards: 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: No unusual fire or explosion hazards noted.

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: 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. Ensure adequate ventilation.

Methods and material for containment and cleaning up: Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk.

Environmental Precautions: Avoid release to the environment. 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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact during pregnancy and while nursing. Obtain special instructions before use. Wash hands thoroughly after handling.

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 |
|--|------------|-----------------------|---|
| Distillates (petroleum), hydrotreated heavy naphthenic - Mist. | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011) |
| | STEL | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011) |
| Distillates (petroleum), hydrotreated heavy naphthenic - Mist. | TWA | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (05 2013) |
| Distillates (petroleum), hydrotreated heavy naphthenic - Inhalable fraction. | TWA | 5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015) |
| Barium compound - as Ba | TWA | 0.5 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009) |
| Barium compound - as Ba | TWA | 0.5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011) |
| Barium compound - as Ba | TWA | 0.5 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Barium compound - as Ba | 8 HR ACL | 0.5 mg/m3 | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009) |
| | 15 MIN ACL | 1.5 mg/m3 | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009) |
| Barium compound - as Ba | TWA | 0.5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (11 2011) |
| Barium compound - as Ba | TWA | 0.5 mg/m3 | US. ACGIH Threshold Limit Values (03 2012) |

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

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:

No data available.

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

No data available.

Flash Point:

154 °C

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:

0.97

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:

45 mm²/s (40 °C)

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: | Avoid heat or contamination. |
| 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

| | |
|----------------------|--|
| Inhalation: | Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Prolonged skin contact may cause redness and irritation. |
| Eye contact: | Eye contact is possible and should be avoided. |
| Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. May be harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics

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

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

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

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: May cause harm to breastfed babies.

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. Canadian Environmental Protection Act (CEPA). National Pollutant Release Inventory (NPRI) (Parts 1-4)

NPRI Not Regulated

Greenhouse Gases

Not Regulated

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

Issue Date: 05/18/2017

Revision Date: 04/04/2017

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.