

SAFETY DATA SHEET

1. Identification

| Product name | LUBRODAL F 182 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: | sds@fuchsus.com |

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

2. Hazard(s) identification

Hazard Classification

Not classified as hazardous under GHS

Label Elements

| Hazard Symbol: | No symbol |
|-----------------------------|-----------------|
| Signal Word: | No signal word. |
| Hazard Statement: | Not applicable |
| Precautionary Statements | Not applicable |

None.

Other hazards which do not result in GHS classification:



3. Composition/information on ingredients

Hazardous Component(s):

| Chemical name | CAS-No. | Concentration |
|---|--|---------------|
| Graphite | 7782-42-5 | 10 - 20% |
| Triazine compound | Confidential | 0.1 - 1% |
| Specific chemical identities and/or exact per | centages have been withheld as trade secrets | 8. |
| Graphite | 7782-42-5 | 10 - <20% |
| Triazine compound | Confidential | 0.1 - <1% |
| Sodium hydroxide | 1310-73-2 | 0 - <0.1% |
| Monoethanolamine | 141-43-5 | 0 - <0.1% |
| Sodium chloride | 7647-14-5 | 0.001 - <1% |
| 1,4-Dioxane | 123-91-1 | 0 - <0.1% |
| Ethylene oxide | 75-21-8 | 0 - <0.1% |

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

| 4. First-aid measures | | |
|--|--|--|
| Ingestion: | Rinse mouth thoroughly. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce vomiting. | |
| 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. | |
| 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: | 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 | d 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 | 5 |
| 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. |
| 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 **Exposure Limit Values** Type Source Graphite - Respirable fraction. TWA 2 mg/m3 US. ACGIH Threshold Limit Values (03 2012) Graphite - Total dust. PEL US. OSHA Table Z-1 Limits for Air 15 mg/m3 Contaminants (29 CFR 1910.1000) (02 2006) PEL Graphite - Respirable fraction. US. OSHA Table Z-1 Limits for Air 5 mg/m3 Contaminants (29 CFR 1910.1000) (02 2006) Graphite TWA 15 millions of US. OSHA Table Z-3 (29 CFR 1910.1000) particles per cubic (2000)foot of air **Chemical name Exposure Limit Values** Source Туре Graphite - Respirable fraction. TWA US. ACGIH Threshold Limit Values (03 2 mg/m3 2012) Graphite - Total dust. PEL 15 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) US. OSHA Table Z-1 Limits for Air Graphite - Respirable fraction. PEL 5 mg/m3 Contaminants (29 CFR 1910.1000) (02 2006) Graphite TWA 15 millions of US. OSHA Table Z-3 (29 CFR 1910.1000) particles per cubic (2000)foot of air PEL US. OSHA Table Z-1 Limits for Air Sodium hydroxide 2 mg/m3 Contaminants (29 CFR 1910.1000) (02 2006) Sodium hydroxide Ceiling 2 mg/m3 US. ACGIH Threshold Limit Values (03 2012) TWA Monoethanolamine 3 ppm US. ACGIH Threshold Limit Values (03 2012) Monoethanolamine STEL 6 ppm US. ACGIH Threshold Limit Values (03 2012) Monoethanolamine STEL US. OSHA Table Z-1-A (29 CFR 6 ppm 15 mg/m3 1910.1000) (1989) Monoethanolamine TWA 3 ppm 8 mg/m3 US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989) TWA US. ACGIH Threshold Limit Values (03 1,4-Dioxane 20 ppm 2012) 1,4-Dioxane PEL 100 ppm 360 mg/m3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) Ethylene oxide TWA 1 ppm US. ACGIH Threshold Limit Values (03 2012)

Protective Measures:

Use personal protective equipment as required.

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 SDS US



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: | Black |
| Odor: | Mild |
| Odor threshold: | No data available. |
| pH: | 9.5 |
| 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: | 1.122 |
| Solubility(ies) | |
| Solubility in water: | Miscible with 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: | 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. |
| 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

| Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. Harmful if swallowed. |
|---|--|
| 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. |
| Symptoms related to the physica Ingestion: | I, chemical and toxicological characteristics No data available. |
| Inhalation: | No data available. |
| Skin Contact: | No data available. |
| Eye contact: | No data available. |
| Information on toxicological effe | cts |
| Acute toxicity (list all possible | routes of exposure) |
| Oral Product: | Not classified for acute toxicity based on available data. |
| Dermal Product: | Not classified for acute toxicity based on available data. |
| Inhalation Product: | Not classified for acute toxicity based on available data. |
| Repeated dose toxicity 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): 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.

No data available.

Aspiration Hazard Product: No data available. Other effects: No data available.

12. Ecological information

Skin Corrosion/Irritation

Product:

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

Not regulated.

IMDG

Not regulated.

ΙΑΤΑ

Not regulated.

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 None

Not classified as hazardous under GHS Not classified as hazardous under GHS

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations



US. California Proposition 65



This product can expose you to chemicals includingEthylene oxidewhich is [are] known to the State of California to cause cancer and birth defects or other reproductive harm.

1,4-Dioxanewhich is [are] known to the State of California to cause cancer.

For more information go to www.P65Warnings.ca.gov.

| 16.Other information, including date of preparation or last revision | |
|--|---|
| Issue Date: | 29.10.2018 |
| Revision Date: | 29.10.2018 |
| 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. |