

1. Identification		
Product name		LUBRODAL F 645 EX
Other means of identificatio	'n	No data available.
Recommended use:		Metalworking fluid
Restrictions on use:		Industrial use only
Manufacturer/Importer/Supp	lier/Distributor Informatio	n
Manufacturer Company Name: Address: Telephone: Fax: Contact Person: E-mail: Emergency telephone number	Fuchs Lubricants Co. 17050 Lathrop Avenue Harvey, Illinois 60426 708-333-8900 708-333-9180 EHS Department msds@fuchs.com er: 708-333-8900 (Bus. hrs) 800-255-3924 (24 hrs)
2. Hazard(s) identification		
Hazard Classification	Not classified as haza	rdous under 29CFR 1910.1200 (HazCom 2012)
Label Elements		
Hazard Symbol:	No symbol	
Signal Word:	No signal word.	
Hazard Statement:	Not applicable	
Precautionary Statement	Not applicable	
Other hazards which do not result in GHS classification:	None.	
3. Composition/information	on ingredients	



Hazardous Component(s):

Chemical name	CAS-No.	Concentration
Graphite	7782-42-5	10 - 30%
Inorganic silicate compound	Confidential	1 - 5%
Cellulose compound	Confidential	1 - 5%

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 or doctor if you feel unwell. Do NOT induce vomiting.
Inhalation:	Move to fresh air. Call a Poison Center or doctor if you feel unwell.
Skin Contact:	Remove contaminated/saturated 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/effec	ts, acute and delayed
Symptoms:	No data available.
Indication of immediate medical a	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) exting	uishing media
Suitable extinguishing media:	No data available.
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 ar	nd precautions for firefighters
Special fire fighting procedures: MSDS_US - R00000451493	No data available.



Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment appropriate for industrial fires.
6. Accidental release measures	s
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. 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 and protect against releases into the environment. Remediate as appropriate.
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. 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** type **Exposure Limit Values** Source Graphite - Respirable fraction. TWA 2 mg/m3 US. ACGIH Threshold Limit Values (03 2012) PEL Graphite - Total dust. US. OSHA Table Z-1 Limits for Air 15 mg/m3 Contaminants (29 CFR 1910.1000) (02 2006) Graphite - Respirable fraction. PEL US. OSHA Table Z-1 Limits for Air 5 mg/m3 Contaminants (29 CFR 1910.1000) (02 2006) **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 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.

9. Physical and chemical properties

Appearance	
Physical state:	Liquid
Form:	No data available.
Color:	Black
Odor:	Mild
Odor threshold:	No data available.
pH:	11
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 (%): Flammability limit - lower (%): Explosive limit - upper (%): Explosive limit - lower (%): Vapor pressure: Vapor density: Relative density: Solubility(ies) Solubility(ies) Solubility in water: Solubility (other): Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity:

No data available. 1.1

Soluble No data available. No data available. No data available. No data available. > 2 mm2/s (40 °C)

10. Stability and reactivity

Reactivity:	Not reactive during normal use.
Chemical Stability:	No data available.
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.
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 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 effect	cts
Acute toxicity (list all possible	routes of exposure)
Oral Product:	ATEmix (): > 5000 mg/kg
Dermal Product:	ATEmix (): > 5000 mg/kg
Inhalation Product:	ATEmix (, 4 h): > 5 mg/l Dusts, mists and fumes
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation Product:	No data available.
Serious Eye Damage/Eye Irritation Product:	on No data available.
Respiratory or Skin Sensitization Product:	n No data available.
Carcinogenicity Product:	No data available.
IARC Monographs on the E No carcinogenic components	Evaluation of Carcinogenic Risks to Humans: identified
US. National Toxicology Pr No carcinogenic components	ogram (NTP) Report on Carcinogens: 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 Toxicit Product:	y - Single Exposure No data available.
Specific Target Organ Toxicit Product:	y - Repeated Exposure No data available.
Aspiration Hazard Product:	No data available.
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	

This material is not subject to transport regulations.

15. Regulatory information	
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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

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:	27.05.2015
Revision Date:	08.05.2015
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.