SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: FM LUBE OIL 460

Other means of identification: No data available.

Recommended use of the chemical and restrictions on use

Recommended use: Lubricating fluid
Recommended restrictions: Industrial use only

Manufacturer/Importer/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

Health Hazards

Acute toxicity (Dermal)	Category 5
Skin Corrosion/Irritation	Category 3

Unknown toxicity - Health

Acute toxicity, oral	4.5 %
Acute toxicity, dermal	4.51 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	5.41 %

Label Elements

Hazard Symbol:	No symbol
Signal Word:	Warning
Hazard Statement:	H313: May be harmful in contact with skin. H316: Causes mild skin irritation.

Precautionary Statements

Response: P332+P313: If skin irritation occurs: Get medical advice/attention.
P312: Call a POISON CENTER or doctor/ physician if you feel unwell.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
White mineral oil	8042-47-5	60 - 100%
Butene, homopolymer	9003-29-6	30 - 60%
Coconut oil	8001-31-8	3 - 7%
Benzoic acid	65-85-0	0.1 - 1%
N-2-Naphthylaniline	135-88-6	<0.1%
Aniline	62-53-3	<0.1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

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.

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

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 fire-fighters

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.
For non-emergency personnel:	No data available.
For emergency responders:	No data available.
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:	Contains a component that when heated at or above 300F (150C) may generate Formaldehyde vapors. 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

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
White mineral oil	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Coconut oil - Respirable fraction.	VLE-PPT	3 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Coconut oil - Inhalable fraction.	VLE-PPT	10 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Aniline	VLE-PPT	2 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

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:	260 °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:	0.8855
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:	414 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. formaldehyde

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.

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:	ATEmix (): > 5000 mg/kg

Dermal

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

Inhalation

Product:	No data available.

Specified substance(s):

White mineral oil	LC 50 (Rat): > 5.2 mg/l LC 50 (Rat): > 5 mg/l
Butene, homopolymer	LC 50 (Rat): > 5.001 mg/l LC 50 (Rat): > 3.8 mg/l LC 50 (Rat): > 19,171 mg/m3
Benzoic acid	LC 50 (Rat): > 12,200 mg/m3 LC 50 (Rat): > 0.026 mg/l LC 50 (Rat): > 0.026 mg/l
Aniline	LC 50 (Rat): > 2.1 mg/l

Repeated dose toxicity

Product:	No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

White mineral oil	in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Supporting study
Butene, homopolymer	in vivo (Rabbit): Moderately irritating , 24 - 72 h Experimental result, Key study in vivo (Rabbit): Category 2 , 1 - 72 h Experimental result, Key study in vivo (Rabbit): Not irritant , 1 h Experimental result, Key study
Benzoic acid	Irritating in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Supporting study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

White mineral oil	Rabbit, 24 - 72 h: Not irritant EU Rabbit, 24 - 72 h: Not irritant EU Rabbit, 24 - 72 h: Not irritant EU
Butene, homopolymer	Rabbit, 1 h: Mild irritant US EPA pesticides Rabbit, 1 - 168 h: Not irritant EU Rabbit, 24 - 72 h: Not irritant EU Rabbit, 72 h: Not irritant EU Rabbit, 24 - 72 h: Not irritant EU Rabbit, 1 - 48 h: Not irritant EU Rabbit, 1 - 72 h: Not irritant EU
Benzoic acid	Irritating Rabbit, 24 - 72 h: Corrosive EU Rabbit, 24 - 72 h: Corrosive EU Rabbit, 24 - 72 h: Category 1 EU Rabbit, 24 - 72 h: Category 1 EU Rabbit, 24 - 72 h: Corrosive EU Rabbit, 24 - 72 h: Category 1 EU Rabbit, 24 - 72 h: Corrosive EU

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

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:	No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.

Specified substance(s):

Butene, homopolymer	LC 50 (Fish, 96 h): > 1,000 mg/l
Benzoic acid	LC 50 (Fish, 96 h): 44.6 mg/l LC 50 (Fish, 96 h): 47.3 mg/l
Aniline	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 0.025 - 0.037 mg/l Mortality

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

Butene, homopolymer	EC50 (Daphnia, 48 h): > 1,000 mg/l
Benzoic acid	EC50 (Daphnia, 48 h): 640 mg/l EC50 (Daphnia, 48 h): > 100 mg/l EC50 (Daphnia, 24 h): 102 - 500 mg/l
Aniline	EC50 (Water flea (Daphnia magna), 48 h): 0.08 - 1 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.

Specified substance(s):

Benzoic acid	NOEC (Fish, 28 d): > 120 mg/l

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

Benzoic acid	NOEC (Daphnia, 21 d): >= 25 mg/l

Toxicity to Aquatic Plants

Product:	No data available.

Specified substance(s):

Benzoic acid	EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 33.1 mg/l
Aniline	LC 50 (Green algae (Chlorella vulgaris)): > 183.9 mg/l Mortality

Persistence and Degradability

Biodegradation

Product:	No data available.

BOD/COD Ratio

Product:	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.

Specified substance(s):

Benzoic acid	Green algae (Oedogonium cardiacum), Bioconcentration Factor (BCF): 102 (Static) Green algae (Chlorella fusca), Bioconcentration Factor (BCF): 3 (Not reported) Green algae (Chlorella fusca), Bioconcentration Factor (BCF): 10 (Not reported) Green algae (Chlorella fusca vacuolata), Bioconcentration Factor (BCF): 3 (Static) Western mosquitofish (Gambusia affinis), Bioconcentration Factor (BCF): 21 (Static)
Aniline	Minnow,carp family (Cyprinidae), Bioconcentration Factor (BCF): 1.1 (Not reported) Goldfish (Carassius auratus), Bioconcentration Factor (BCF): 1.1 (Not reported) Killifish, topminnow family (Cyprinodontidae), Bioconcentration Factor (BCF): 1.1 (Not reported) Green algae (Chlorella fusca), Bioconcentration Factor (BCF): 4 (Not reported) Green algae (Chlorella fusca), Bioconcentration Factor (BCF): 10 (Not reported)

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.

Specified substance(s):

Butene, homopolymer	Log Kow: 4.12 - 9.91 No QSAR, Supporting study Log Kow: 7.6 - 7.8 20 °C No Experimental result, Key study
Benzoic acid	Log Kow: 1.81 - 1.88 No Experimental result, Supporting study
N-2-Naphthylaniline	Log Kow: 4.38
Aniline	Log Kow: 0.9 - 0.92 No Not specified, Not specified

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

White mineral oil	No data available.
Butene, homopolymer	No data available.
Coconut oil	No data available.
Benzoic acid	No data available.
N-2-Naphthylaniline	No data available.
Aniline	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

DOT
Not Regulated.

IATA
Not Regulated.

IMDG
Not Regulated.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Mexico. Substances subject to reporting for the pollutant release and transfer registry (PRTR)

None present or none present in regulated quantities.

Mexico. Federal Law for the Control of Chemical Substances Susceptible to Diversion to Manufacturing of Chemical Weapons, Appendix 1: National list of chemical substances
Not applicable

Mexico. Wastewater Discharges - Maximum Limits into Coastal Waters, Dams, Rivers, Soil and Wetlands (NOM-001-ECOL)
none

Mexico. Hazardous Chemicals (NOM-028-STPS-2012, System for administration of workplace safety in the process and critical equipment for handling hazardous chemicals, Appendix A, Table A.I)
Not applicable

Mexico. Narcotic Drugs List (General Health Law, Articles 234 & 239, Feb. 7, 1984)
Not applicable

Mexico. Psychotropic Drugs (General Health Law, Feb. 7, 1984, Articles 245 & 254 Bis)
Not applicable

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

Issue Date:	02/19/2024
Revision Information:	02/19/2024**:** ARGHS_MX
Version #:	1.1
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.