

SAFETY DATA SHEET

1. Identification

Product name	ECOCOOL 406 F
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
Telephone: Fax:	Harvey, Illinois 60426 708-333-8900 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

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Toxic to reproduction	Category 2

Label Elements

Hazard Symbol:



Danger



Hazard Statement:	Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.
Precautionary Statements	
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.
Response:	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing. Specific treatment (see supplemental first aid instructions on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF exposed or concerned: Get medical advice/attention.
Storage:	Store locked up.
Disposal:	Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.
hazards which do not	None

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

Unknown toxicity - Health

Acute toxicity, oral	11.89 %
Acute toxicity, dermal	14.11 %
Acute toxicity, inhalation, vapor	34.22 %
Acute toxicity, inhalation, dust	33.86 %
or mist	

3. Composition/information on ingredients

Hazardous Component(s):

Chemical name	CAS-No.	Concentration
Mineral oil	Confidential	5 - <10%
Alkyl alkanolamine	Confidential	5 - <10%
Ethoxylated alcohol	Confidential	2.5 - <5%
Boric acid	10043-35-3	1 - <3%
Monoethanolamine	141-43-5	1 - <2.5%



0.25 - <1%

Specific chemical identities and/or exact percentages have been withheld as trade secrets.			
4. First-aid measures			
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.		
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:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.		
Most important symptoms/effects, acute and delayed			
Symptoms:	No data available.		
Indication of immediate medical attention and special treatment needed			

Confidential

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

Biocide

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.		



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.		
Methods and material for containment and cleaning up:	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.		
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		

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 Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Contains amines. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

8. Exposure controls/personal protection

Exposure Limits

Chemical name	Туре	Exposure Limit Values		Source
Mineral oil - Mist.	PEL		5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Boric acid - Inhalable fraction.	TWA		2 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2012)
Boric acid - Inhalable fraction.	STEL		6 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2012)
Monoethanolamine	TWA	3 ppm		US. ACGIH Threshold Limit Values, as amended (03 2012)
Monoethanolamine	STEL	6 ppm		US. ACGIH Threshold Limit Values, as amended (03 2012)
Monoethanolamine	STEL	6 ppm	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Monoethanolamine	TWA	3 ppm	8 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)

Store locked up.



Protective Measures:	Provide easy access to water supply and eye wash facilities. 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:	Yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	9.9
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:	1.013
Solubility(ies)	
Solubility in water:	No data available.
SDS 11 S	



Solubility (other): Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: No data available. No data available. No data available. No data available. 24.3 mm2/s (40 °C)

Other information VOC:

11.4 % (Method 24) 65.3 g/l (ASTM E 1868-10)

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:	Harmful if swallowed.	
Inhalation:	Harmful if inhaled.	
Skin Contact:	May cause an allergic skin reaction. Prolonged or repeated skin contact may cause drying, cracking, or irritation.	
Eye contact:	Causes serious eye damage.	
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 (): > 5000 mg/kg Inhalation **Product:** Vapour: ATEmix (, 4 h): > 20 mg/l Vapour **Repeated dose toxicity** Product: No data available. **Skin Corrosion/Irritation** No data available. Product:

Serious Eye Damage/Eye Irritation Product: No data available.

Respiratory or Skin Sensitization Product: May cause an allergic skin reaction.

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:	Suspected of damaging fertility or the unborn child. A human study of occupationally exposed borate worker population showed no adverse reproductive effects. Animal studies indicate that boric acid reduces or inhibits sperm production, cause testicular atrophy, and when given to pregnant animals during gestation, may cause developmental changes. These feed studies were conducted under chronic exposure conditions leading to doses many times in excess of those that could occur through inhalation of dust in the occupational setting.	
Specific Target Organ Toxicity - Product:	- Single Exposure No data available.	
Specific Target Organ Toxicity - Product:	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		

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), as amended None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard Skin Corrosion or Irritation Serious eye damage or eye irritation Respiratory or Skin Sensitization Reproductive toxicity

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 includingDiethanolaminePropylene oxide1,4-Dioxanewhich is [are] known to the State of California to cause cancer.

Ethylene oxidewhich is [are] known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

Issue Date:	09.11.2022
Revision Date:	09.11.2022
Version #:	1.5
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.