SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: ECO DRAW HVE2

Other means of identification: No data available.

Recommended use of the chemical and restrictions on use

Recommended use: Metalworking 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

Skin Corrosion/Irritation	Category 3
Toxic to reproduction	Category 2

Unknown toxicity - Health

Acute toxicity, oral	9.04 %
Acute toxicity, dermal	12.68 %
Acute toxicity, inhalation, vapor	43.42 %
Acute toxicity, inhalation, dust or mist	43.42 %

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement:
H316: Causes mild skin irritation.
H361: Suspected of damaging fertility or the unborn child.

Precautionary Statements

Prevention:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P332+P313: If skin irritation occurs: Get medical advice/attention.
P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage: P405: Store locked up.

Disposal: P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Tall oil, compound with triethanolamine	68092-29-5	10 - 30%
Polypropylene glycol monobutyl ether	9003-13-8	7 - 13%
Hexylene glycol	107-41-5	5 - 10%
Triethanolamine	102-71-6	3 - 7%
Boric Acid	10043-35-3	1 - 5%
Triazine compound	4719-04-4	0.1 - 1%
Monoethanolamine	141-43-5	<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: 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. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Hexylene glycol	VLE-P	25 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Triethanolamine	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Boric Acid - Inhalable fraction.	VLE-PPT	2 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
	VLE-CT	6 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Monoethanolamine	VLE-CT	6 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
	VLE-PPT	3 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:	Yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	8.6
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.
Density:	No data available.
Relative density:	1.028
Solubility(ies)	

Solubility in water:	Soluble
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.

Other information

VOC:	0.01 g/l

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.

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 (): > 5000 mg/kg

Inhalation

Product: No data available.

Specified substance(s):

Boric Acid	LC 50 (Rat): > 0.16 mg/l LC 50 (Rat): > 2.03 mg/l LC 50 (Rat): > 2.03 mg/l LC 50 (Rat): > 2.12 mg/l LC 50 (Rat): > 2 mg/m3 LC 50 (Rat): > 0.16 mg/l
Monoethanolamine	LC 50 (Rat): > 1.3 mg/l LC 0 (Rat): 1.3 mg/l LC 50: 11 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Polypropylene glycol monobutyl ether	In vitro (Human): Irritating , 3 min Experimental result, Key study
Hexylene glycol	Irritating in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study in vivo (Rabbit): Slightly irritating , 24 - 72 h Experimental result, Not specified
Triethanolamine	in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Supporting study
Boric Acid	in vivo (Guinea pig): Not irritant , 72 h Experimental result, Supporting study in vivo (Rabbit): not corrosive , 48 h Experimental result, Supporting study in vivo (Rabbit): Not irritant , 72 h Experimental result, Supporting study in vivo (Rabbit): Not classifiable , 72 h Experimental result, Key study
Triazine compound	in vivo (Rabbit): Not irritant , 24 - 72 h Experimental result, Key study
Monoethanolamine	in vivo (Rabbit): Corrosive , 24 - 72 h Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Hexylene glycol	Irritating Rabbit, 24 - 72 h: Not irritant CLP (1272/2008) Rabbit, 24 - 72 h: Not irritant CLP (1272/2008) Rabbit, 24 - 72 h: Not irritant CLP (1272/2008) Rabbit, 24 - 72 h: Not irritant CLP (1272/2008) Rabbit, 24 - 72 h: Not irritant CLP (1272/2008)
Boric Acid	Rabbit, 24 - 72 h: Category III 67/548/EEC

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: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s):

Monoethanolamine	Respiratory tract irritation.

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):

Polypropylene glycol monobutyl ether	LC 50 (Fish): 10 mg/l EC50 (Fish): 100 mg/l
Hexylene glycol	LC 50 (Bleak (Alburnus alburnus), 96 h): 7,000 - 9,100 mg/l Mortality
Triethanolamine	LC 50 (Rainbow Trout, 4 d): 11,800 mg/l LC 50 (Fish, 96 h): > 100 mg/l LC 50 (Lepomis macrochirus, 96 h): 450 mg/l
Boric Acid	LC 50 (Rainbow Trout, 24 d): 150.0 mg/l LC 50 (Goldfish, 3 d): 178 mg/l
Triazine compound	LC 50 (Fish, 96 h): 10 - 100 mg/l
Monoethanolamine	LC 50 (Fish, 96 h): 349 mg/l LC 50 (Fish, 96 h): 125 mg/l

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

Polypropylene glycol monobutyl ether	LC 50 (Scud (Gammarus fasciatus), 96 h): 7.06 - 40.9 mg/l Mortality
Hexylene glycol	EC50 (Water flea (Ceriodaphnia reticulata), 48 h): 2,400 - 3,200 mg/l Intoxication
Triethanolamine	EC50 (Daphnia, 21 d): > 16 mg/l EC50 (Daphnia, 48 h): 609.9 mg/l EC50 (Daphnia, 24 h): 1,386 mg/l
Boric Acid	LC 50 (Daphnids (no species mentioned), 48 h): 133 mg/l
Triazine compound	EC50 (Daphnia, 48 h): 10 - 100 mg/l
Monoethanolamine	EC50 (Daphnia, 48 h): 65 mg/l EC50 (Daphnia, 48 h): 33 mg/l

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.

Specified substance(s):

Monoethanolamine	NOEC (Fish, 30 d): 1.2 mg/l

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

Monoethanolamine	NOEC (Daphnia, 21 d): 0.85 mg/l

Toxicity to Aquatic Plants

Product:	No data available.

Specified substance(s):

Triethanolamine	EC50 (Alga, 72 h): 216 mg/l EC50 (Alga, 96 h): 169 mg/l
Boric Acid	LC 50 (Waterweed (Elodea canadensis), 21 d): 5 mg/l Mortality
Monoethanolamine	EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): 2.8 mg/l EC50 (Algae (Pseudokirchneriella subcapitata), 72 h): 15 mg/l

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):

Monoethanolamine	Potential to bioaccumulate is low.

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.

Specified substance(s):

Hexylene glycol	Log Kow: 0.58
Triethanolamine	Log Kow: -1.75 - -1.32 No Estimated by calculation, Weight of Evidence study
Boric Acid	Log Kow: 0.175
Monoethanolamine	Log Kow: +/- 1.19 25 °C

Mobility in soil:	No data available.

Known or predicted distribution to environmental compartments

Tall oil, compound with triethanolamine	No data available.
Polypropylene glycol monobutyl ether	No data available.
Hexylene glycol	No data available.
Triethanolamine	No data available.
Boric Acid	No data available.
Triazine compound	No data available.
Monoethanolamine	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)
Not applicable

Mexico. Federal Law for the Control of Chemical Substances Susceptible to Diversion to Manufacturing of Chemical Weapons, Appendix 1: National list of chemical substances

Triethanolamine	Precursors Chemicals Group 3: Chemicals listed in Group 3B can be used in the production of toxic chemicals hence are prohibited from exports and returns to states not party to the convention without prior authority from the recipient state. A certificate of final use is required. See CWC, Verification Annex, Part VIII.

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:	03/11/2025
Revision Information:	03/07/2025**:** ARGHS_MX
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.