SAFETY DATA SHEET

1. Identification of the hazardous chemical and of the supplier

Product identifier: ECOCOOL 712

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:	LUBRICANTES FUCHS DE MEXICO, S.A. DE C.V.
Address:	Acceso C No. 101 Parque Industrial Jurica C.P. 76120 Querétaro, Qro/México
Telephone:	+ 52 (442) 238-9100
Fax:	+ 52 (442) 238-9110
Contact Person:	Departamento de Calidad
E-mail:	info@fuchs.com.mx

Emergency telephone number:
CENACOM:
01 800 00 41 300 sin costos y (55) 55 50 15 52, 55) 55 50 14 96 en la Cd. de Mexico
SETIQ:
01 800 00 214 00 sin costos y (55) 55 59 15 88 en la Cd. de Mexico
COATEA:
01 800 710 49 43 sin costos y (55) 26 15 20 45 y (55) 54 49 63 91 en la Cd. de Mexico

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A

Environmental Hazards

Acute hazards to the aquatic environment	Category 3

Label Elements

Hazard Symbol:

Signal Word: Warning

Hazard Statement:
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H402: Harmful to aquatic life.

Precautionary Statements

Prevention:
P264: Wash hands thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/eye protection/face protection.

Response:
P302+P352: IF ON SKIN: Wash with plenty of water.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P321: Specific treatment (see in product SDS).
P362+P364: Take off contaminated clothing and wash it before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

Disposal:
P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Mineral oils	Trade Secret	15 - 40%
Ethoxylated alcohol	Trade Secret	1 - 5%
Boric acid	Trade Secret	1 - 5%
Monoethanolamine	Trade Secret	1 - 5%
Triethanolamine	Trade Secret	1 - 5%
Hexylene glycol	Trade Secret	1 - 5%

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

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

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 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

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.

For non-emergency personnel: No data available.

For emergency responders: No data available.

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: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling: Contains amines. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. Wash hands thoroughly after handling. Add material slowly when mixing with water. Do not add water to the material; instead, add the material to the water. Avoid contact with skin.

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
Mineral oils - Mist.	TWA	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control)
	STEL	10 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control)
Boric acid - Inhalable fraction.	VLE-PPT	2 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control) (04 2014)
	VLE-CT	6 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control) (04 2014)
Monoethanolamine	VLE-CT	6 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control) (04 2014)
	VLE-PPT	3 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control) (04 2014)
Triethanolamine	VLE-PPT	5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control) (04 2014)

Hexylene glycol	VLE-P	25 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control) (04 2014)

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: 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.

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:	liquid
Color:	Amber
Odor:	Characteristic
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:	No data available.
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:	0.988
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.

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:	Harmful if inhaled.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.
Ingestion:	May be harmful if swallowed.

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: ATEmix (, 4 h): > 20 mg/l Vapour

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):

Ethoxylated alcohol	estimated Irritating. May cause irritation when held in occluded contact with the skin. in vivo (Rabbit): Irritating; R38 Experimental result, Key study
Boric acid	in vivo (Rabbit): Not irritant Experimental result, Supporting study
Triethanolamine	in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation
Product: No data available.
Specified substance(s):

Ethoxylated alcohol	Rabbit, 24 - 72 hrs: Not irritating EU Slightly irritating.

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.
Specified substance(s):
Boric acid — 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):

Ethoxylated alcohol	LC 50 (Fish, 96 h): 10 - 100 mg/l
Boric acid	LC 50 (Rainbow Trout, 24 d): 150.0 mg/l LC 50 (Goldfish, 3 d): 178 mg/l
Monoethanolamine	LC 50 (Fish, 96 h): 349 mg/l LC 50 (Fish, 96 h): 125 mg/l
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

Hexylene glycol	LC 50 (Bleak (Alburnus alburnus), 96 h): 7,000 - 9,100 mg/l Mortality

Aquatic Invertebrates

Product:	No data available.

Specified substance(s):

Boric acid	LC 50 (Daphnids (no species mentioned), 48 h): 133 mg/l
Monoethanolamine	EC50 (Daphnia, 48 h): 65 mg/l EC50 (Daphnia, 48 h): 33 mg/l
Triethanolamine	EC50 (Daphnia, 21 d): > 16 mg/l EC50 (Daphnia, 48 h): 609.9 mg/l EC50 (Daphnia, 24 h): 1,386 mg/l
Hexylene glycol	EC50 (Water flea (Ceriodaphnia reticulata), 48 h): 2,400 - 3,200 mg/l Intoxication

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):

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
Triethanolamine	EC50 (Alga, 72 h): 216 mg/l EC50 (Alga, 96 h): 169 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):

Monoethanolamine	Log Kow: +/- 1.19 25 °C
Triethanolamine	Log Kow: -1.75 - -1.32 No Estimated by calculation, Weight of Evidence study

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Mineral oils	No data available.
Ethoxylated alcohol	No data available.
Boric acid	No data available.
Monoethanolamine	No data available.
Triethanolamine	No data available.
Hexylene glycol	No data available.

Other adverse effects: Harmful to aquatic organisms.

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

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:	02/12/2019
Revision Information:	02/12/2019**:** 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.