

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: ECOCOOL G40

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Coolant/ Cutting solution

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier FUCHS LUBRICANTS DENMARK ApS
Tuborg Boulevard 12, 3
2900 Hellerup DK

Telephone: +45 32 46 3000

Contact Person: HSE Advisor
E-mail: HSEASC@fuchs-oil.com
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1.4 Emergency telephone number: +45 82 12 12 12

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Skin irritation Category 2 H315: Causes skin irritation.

Serious eye irritation Category 2 H319: Causes serious eye irritation.

Environmental Hazards

Chronic hazards to the aquatic environment Category 3 H412: Harmful to aquatic life with long lasting effects.

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements

Product name: ECOCOOL G40



Signal Words: Warning

Hazard Statement(s): H315: Causes skin irritation.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P262: Do not get in eyes, on skin, or on clothing.
P273: Avoid release to the environment.

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.

Supplemental label information

EUH208: Contains: Isothiazolinone derivative. May produce an allergic reaction.

2.3 Other hazards: By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of mineral base oil, anionic and nonionic agents and corrosion preventing additives in combination with stabilizers based on glycol-fatty alcohols. This product is applied only as solution or emulsion in water.

Chemical name	Identifier	Concentration *	REACH Registration No.	Notes
Hexylen glycol	EINECS: 203-489-0	1,00% - <5,00%	01-2119539582-35	
Fatty alcohol, ethoxylated	EC: 500-236-9	2,50% - <5,00%	01-2119489407-26	
acid, ionic equilibrium with organic bases	Neutralisation product (*)	1,00% - <5,00%		
Fatty alcohol ethoxylate	EC: 614-482-0	1,00% - <5,00%		
tert. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	2,50% - <5,00%		
carboxylic acid derivative, ethoxylated	Confidential	1,00% - <5,00%	Confidential	
Fatty alcohol, ethoxylated	EC: 500-236-9	1,00% - <2,50%	01-2119489407-26	
acid, ionic equilibrium with organic	Neutralisation product (*)	1,00% - <5,00%		

Product name: ECOCOOL G40

bases				
Boric acid	EINECS: 233-139-2	0,30% - <1,00%	01-2119486683-25	**
isothiazolinone derivative	EC: 420-590-7	0,10% - <0,25%	01-0000016721-74	

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

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

** Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

(*) Neutralisation product: Equilibrium of Ionic Pairs in aqueous solution according to REACH Annex V, 4.

Classification

Chemical name	Identifier	Classification
Hexylen glycol	EINECS: 203-489-0	CLP: Skin Irrit. 2;H315, Eye Irrit. 2;H319
Fatty alcohol, ethoxylated	EC: 500-236-9	CLP: Skin Irrit. 2;H315, Aquatic Chronic 2;H411; M-Factor (aquatic chronic): 1
acid, ionic equilibrium with organic bases	Neutralisation product (*)	CLP: Eye Irrit. 2;H319, Aquatic Acute 1;H400, Aquatic Chronic 3;H412
Fatty alcohol ethoxylate	EC: 614-482-0	CLP: Eye Irrit. 2;H319
tert. alkanolamine, ionic equilibrium with acids	Neutralisation product (*)	CLP: Eye Irrit. 2;H319, Skin Irrit. 2;H315, Aquatic Chronic 2;H411, Acute Tox. 3;H311, Acute Tox. 3;H301
carboxylic acid derivative, ethoxylated	Confidential	CLP: Skin Irrit. 2;H315, Aquatic Chronic 3;H412
Fatty alcohol, ethoxylated	EC: 500-236-9	CLP: Skin Irrit. 2;H315, Aquatic Chronic 2;H411
acid, ionic equilibrium with organic bases	Neutralisation product (*)	CLP: Eye Irrit. 2;H319
Boric acid	EINECS: 233-139-2	CLP: Repr. 1B;H360FD
isothiazolinone derivative	EC: 420-590-7	CLP: Skin Corr. 1B;H314, Eye Dam. 1;H318, Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 1

CLP: Regulation No. 1272/2008.

specific concentration limit

Chemical name	Identifier	specific concentration limit	Hazard class	Hazard Category	Hazard statements
Boric acid	EINECS: 233-139-2	>= 5,5 %	Toxic to reproduction	1B	H360FD

For the wording of the listed hazard statements refer to section 16.

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Note L of Annex VI of Regulation EC 1272/2008."

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Product name: ECOCOOL G40

Inhalation:	Supply fresh air; consult doctor in case of symptoms.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Skin Contact:	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.
Ingestion:	Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.
4.2 Most important symptoms and effects, both acute and delayed:	Causes serious eye irritation. Causes skin irritation.
4.3 Indication of any immediate medical attention and special treatment needed	Hand over this safety data sheet to the physician with the special comment "watermiscible cutting oil". Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO₂, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added

Unsuitable extinguishing media: Water with a full water jet.

5.2 Special hazards arising from the substance or mixture:

During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

Special fire fighting procedures: Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions:

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

Product name: ECOCOOL G40

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

6.4 Reference to other sections: See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Avoid contact with skin. Prevent formation of aerosols. Observe good industrial hygiene practices. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities: Local regulations concerning handling and storage of waterpolluting products have to be followed. Store above freezing.

7.3 Specific end use(s): Not applicable

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Base oil, naphthenic - Mist.	GV	1 mg/m ³	Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3, as amended (12 2011)
tert. alkanolamine	GV	0,5 ppm	Denmark. Danish List of Organic Solvents, Danish Labor Inspectorate (08 2007)
tert. alkanolamine	GV	0,5 ppm 3,1 mg/m ³	Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3, as amended (12 2011)
Hexylen glycol	LOFT	25 ppm	Denmark. Danish List of Organic Solvents, Danish Labor Inspectorate (08 2007)
Hexylen glycol	LOFT	25 ppm 125 mg/m ³	Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3, as amended (12 2011)

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. 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.

Individual protection measures, such as personal protective equipment

Product name: ECOCOOL G40

General information:	Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.
Eye/face protection:	Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield. Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.
Skin protection	
Hand Protection:	Material: Nitrile butyl rubber (NBR). Min. Breakthrough time: ≥ 480 min Recommended thickness of the material: $\geq 0,38$ mm
	Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Other:	Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.
Respiratory Protection:	Ensure good ventilation/exhaustion at the workplace. Avoid breathing vapour/ aerosol.
Thermal hazards:	Not known.
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.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Yellow
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	9,8
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	Not applicable
Evaporation Rate:	Not applicable for mixtures

Product name: ECOCOOL G40

Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)-:	Value not relevant for classification
Flammability Limit - Lower (%)-:	Value not relevant for classification
Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	0,98 g/cm ³ (15 °C)
Solubility(ies)	
Solubility in Water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable for mixtures
Autoignition Temperature:	Value not relevant for classification
Decomposition Temperature:	Value not relevant for classification
Kinematic viscosity:	50 mm ² /s (40 °C)
Explosive properties:	Value not relevant for classification
Oxidizing properties:	Value not relevant for classification
9.2 Other information	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	Stable under normal use conditions.
10.2 Chemical Stability:	Stable under normal use conditions.
10.3 Possibility of hazardous reactions:	Stable under normal use conditions.
10.4 Conditions to avoid:	Stable under normal use conditions.
10.5 Incompatible Materials:	Strong oxidizing substances. Strong acids. Strong bases.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes eye irritation.

11.1 Information on toxicological effects

Acute toxicity

Oral	
Product:	ATEmix: 8.900 mg/kg

Product name: ECOCOOL G40

Specified substance(s)

Hexylen glycol	LD 50 (Rat): 4.196 mg/kg
tert. alkanolamine, ionic equilibrium with acids	LD 50 (Rat): > 267 mg/kg
Fatty alcohol, ethoxylated	LD 50 (Rat): > 5.001 mg/kg
Boric acid	LD 50 (Rat, Male): 3.450 mg/kg (OECD 401)
Isothiazolinone derivative	LD 50 (Rat): 4.267 mg/kg

Dermal

Product:	ATEmix: 9.833 mg/kg
Specified substance(s)	
tert. alkanolamine, ionic equilibrium with acids	LD 50 (Rabbit): 295 mg/kg

Inhalation

Product:	Not classified for acute toxicity based on available data.
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Specified substance(s)

Hexylen glycol	LC 50 (Rat, 4 h): > 5,1 mg/l
Boric acid	LC 50 (Rat, Female, Male, 4 h): > 2,12 mg/l (OECD 403)

Skin Corrosion/Irritation:

Product:	Based on available data, the classification criteria are met.
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Specified substance(s)

Fatty alcohol, ethoxylated	OECD 404 (Rabbit, 4 h): Moderate skin irritation
Isothiazolinone derivative	(Rabbit, 1 - 4 h): Corrosive.

Serious Eye Damage/Eye Irritation:

Product:	Based on available data, the classification criteria are met.
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Respiratory or Skin Sensitization:

Product:	Skin sensitizer: Based on available data, the classification criteria are not met. Respiratory sensitizer: Based on available data, the classification criteria are not met.
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Specified substance(s)

Fatty alcohol ethoxylate	No sensitizing effect (guinea pig); OECD 406
Boric acid	No sensitizing effect (guinea pig); OECD 406
Isothiazolinone derivative	, OECD 406-1 (Guinea Pig) May cause sensitization by skin contact.

Product name: ECOCOOL G40

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: Based on available data, the classification criteria are not met.

Other adverse effects:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute toxicity

Product: Based on available data, the classification criteria are not met.

Fish

Specified substance(s)

Hexylen glycol LC 50 (Fish, 96 h): 8.690 mg/l (OECD 203)

Fatty alcohol, ethoxylated LC 50 (Fish, 96 h): 108 mg/l (OECD 203)

tert. alkanolamine, ionic equilibrium with acids LC 50 (Fish, 96 h): > 28 mg/l

carboxylic acid derivative, ethoxylated LC 50 (Fish, 96 h): 2,9 mg/l (OECD 203)

Boric acid LC 50 (Fish, 96 h): 456 mg/l

Isothiazolinone derivative LC 50 (Fish, 96 h): 0,15 mg/l (OECD 203)

Aquatic Invertebrates

Specified substance(s)

Hexylen glycol EC 50 (Water Flea, 48 h): 4.305 mg/l

Fatty alcohol, ethoxylated LC 50 (Water Flea, 48 h): 51 mg/l (OECD 202)

tert. alkanolamine, ionic equilibrium with acids LC 50 (Water Flea, 48 h): > 75 mg/l

carboxylic acid derivative, ethoxylated EC 50 (Water Flea, 48 h): 3,8 mg/l (OECD 202)

Product name: ECOCOOL G40

Boric acid EC 50 (Water Flea, 48 h): 133 mg/l

Isothiazolinone derivative EC 50 (Water Flea, 48 h): 0,093 mg/l (OECD 202)

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish

Specified substance(s)

Fatty alcohol, ethoxylated NOEC (Fish, 30 d): 0,314 mg/l

Aquatic Invertebrates

Specified substance(s)

Fatty alcohol, ethoxylated NOEC (Water Flea, 21 d): 0,0724 mg/l

carboxylic acid derivative, ethoxylated NOEC (Water Flea, 21 d): 0,4 mg/l (OECD 211)

Toxicity to Aquatic Plants

Specified substance(s)

Hexylen glycol EC 50 (Alga, 72 h): > 420 mg/l (OECD 201)

Fatty alcohol, ethoxylated EC 50 (Alga, 72 h): > 100 mg/l

tert. alkanolamine, ionic equilibrium with acids EC 50 (Alga, 72 h): 2 mg/l

carboxylic acid derivative, ethoxylated EC 50 (Alga, 72 h): 410 mg/l

Fatty alcohol, ethoxylated EC 50 (Alga, 72 h): > 10 - 100 mg/l (OECD 201)

Boric acid EC 50 (Alga, 72 h): 229 mg/l

Isothiazolinone derivative ErC50 (Alga, 72 h): 0,45 mg/l (OECD 201)
NOEC (Alga, 72 h): 0,099 mg/l

12.2 Persistence and Degradability

Biodegradation

Product:

Not applicable for mixtures

Specified substance(s)

Hexylen glycol 81 % (21 d, OECD 301F) Readily biodegradable

Fatty alcohol, ethoxylated Readily biodegradable

Fatty alcohol ethoxylate (OECD 301D) Readily biodegradable

carboxylic acid derivative, ethoxylated Readily biodegradable

Fatty alcohol, ethoxylated Readily biodegradable

Isothiazolinone derivative Not easily biodegradable

Product name: ECOCOOL G40

12.3 Bioaccumulative potential

Product: Not applicable for mixtures
Specified substance(s)
 tert. alkanolamine, ionic equilibrium with acids Bioconcentration Factor (BCF): < 50

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Other adverse effects:

Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

European Waste Codes

12 01 09*: machining emulsions and solutions free of halogens

SECTION 14: Transport information

ADR/RID

- 14.1 UN Number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
 Class: Non-dangerous goods
 Label(s): —
 Hazard No. (ADR): —
 Tunnel restriction code: —
- 14.4 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

ADN

- 14.1 UN Number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
 Class: Non-dangerous goods
 Label(s): —
- 14.3 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

Product name: ECOCOOL G40

IMDG

- 14.1 UN Number: –
- 14.2 UN Proper Shipping Name: –
- 14.3 Transport Hazard Class(es)
 - Class: Non-dangerous goods
 - Label(s): –
 - EmS No.: –
- 14.3 Packing Group: –
- 14.5 Environmental hazards: –
- 14.6 Special precautions for user: –

IATA

- 14.1 UN Number: –
- 14.2 Proper Shipping Name: –
- 14.3 Transport Hazard Class(es):
 - Class: Non-dangerous goods
 - Label(s): –
- 14.4 Packing Group: –
- 14.5 Environmental hazards: –
- 14.6 Special precautions for user: –

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

National Regulations

PR-No. 4169154

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Revision Information:

Vertical lines in the margin indicate an amendment.

Product name: ECOCOOL G40

Wording of the H-statements in section 2 and 3

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Other information: The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. It was derived from the test data and/or the application of the conventional method.

Revision Date: 19.05.2020

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.