

## SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

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

#### 1.1 Product identifier

**Product name:** ECOCOOL S-CO 5 BF

#### 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 (UK) PLC.  
New Century Street  
ST1 5HU Hanley  
**Telephone:** +44 (0) 1782 203700

**Contact Person:** Product Safety department  
**E-mail:** product.safety@fuchs.com  
**Telephone:** +44 (0) 1782 203700

**1.4 Emergency telephone number:** UK NHS: Dial 111

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation GB-CLP.

##### Classification according to GB-CLP.

##### 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 S-CO 5 BF



**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.

**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:** Mineral oil free mixture of corrosion preventive agents and glycols. This product is applied only as solution or emulsion in water.

| Chemical name                                | Identifier                 | Concentration * | UK-REACH Registration No. | Notes |
|--|----------------------------|-----------------|---------------------------|-------|
| acid, ionic equilibrium with organic bases   | Neutralisation product (*) | 5,00% - <10,00% |                           |       |
| Glycerol                                     | EINECS: 200-289-5          | 5,00% - <10,00% |                           |       |
| Triazole derivative                          | EINECS: 202-394-1          | 5,00% - <10,00% |                           |       |
| inorganic base, ionic equilibrium with acids | Neutralisation product (*) | 5,00% - <10,00% |                           |       |
| Potassium hydroxide                          | EINECS: 215-181-3          | 1,00% - <2,00%  |                           |       |
| quarternary ammonium compound                | Polymer                    | 0,01% - <0,10%  |                           |       |

\* 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.

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

**Product name:** ECOCOOL S-CO 5 BF

**Classification**

| Chemical name                                | Identifier                 | Classification   |
|--|----------------------------|--|
| acid, ionic equilibrium with organic bases   | Neutralisation product (*) | GBCLP: Acute Tox. 4;H302, Eye Irrit. 2;H319, Skin Irrit. 2;H315  |
| Glycerol                                     | EINECS: 200-289-5          | GBCLP:   |
| Triazole derivative                          | EINECS: 202-394-1          | GBCLP: Acute Tox. 4;H302, Eye Irrit. 2;H319, Aquatic Chronic 2;H411  |
| inorganic base, ionic equilibrium with acids | Neutralisation product (*) | GBCLP: Acute Tox. 4;H302, Eye Irrit. 2;H319, Skin Irrit. 2;H315  |
| Potassium hydroxide                          | EINECS: 215-181-3          | GBCLP: Acute Tox. 4;H302, Skin Corr. 1A;H314, Eye Dam. 1;H318, Met. Corr. 1;H290                                 |
| quarternary ammonium compound                | Polymer                    | GBCLP: Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 10; M-Factor (aquatic chronic): 1 |

GB-CLP

**specific concentration limit**

| Chemical name       | Identifier        | specific concentration limit                      | Hazard class  | Hazard Category    | Hazard statements            |
|---------------------|-------------------|---|---|--------------------|------------------------------|
| Potassium hydroxide | EINECS: 215-181-3 | >= 5 %<br>2 - < 5 %<br>0,5 - < 2 %<br>0,5 - < 2 % | Skin corrosion<br>Skin corrosion<br>Skin irritation<br>Serious eye irritation | 1A<br>1B<br>2<br>2 | H314<br>H314<br>H315<br>H319 |

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

**SECTION 4: First aid measures**
**General:** Instantly remove any clothing soiled by the product.

**4.1 Description of first aid measures**
**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 or doctor/ physician if you feel unwell.

**4.2 Most important symptoms and effects, both acute and delayed:** Causes serious eye irritation. Causes skin irritation.

**Product name:** ECOCOOL S-CO 5 BF

**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:**

CO<sub>2</sub>, 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.

### 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.

Product name: ECOCOOL S-CO 5 BF

## 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
- Storage Class:** 10-13, combustible / non-combustible liquids and solids

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

| Chemical name    | Type | Exposure Limit Values | Source  |
|------------------|------|-----------------------|---|
| Glycerol - Mist. | TWA  | 10 mg/m <sup>3</sup>  | UK. EH40 Workplace Exposure Limits (WELs), 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

- 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.

**Product name:** ECOCOOL S-CO 5 BF

**Skin protection**

**Hand Protection:**

Material: Nitrile butyl rubber (NBR).  
Min. Breakthrough time:  $\geq 480$  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:**

Colorless, Yellow

**Odor:**

Characteristic

**pH:**

9,0 (50 g/l, 20 °C)

**Freezing point:**

not determined

**Boiling Point:**

not determined

**Flash Point:**

Not applicable

**Evaporation Rate:**

Not applicable for mixtures

**Flammability (solid, gas):**

not determined

**Flammability Limit - Upper (%)—:**

Not applicable for mixtures

**Flammability Limit - Lower (%)—:**

Not applicable for mixtures

**Vapor pressure:**

Not applicable for mixtures

**Relative vapor density:**

Not applicable for mixtures

**Density:**

1,10 g/ml (15,00 °C) (DIN 51757)

**Solubility(ies)**

**Solubility in Water:**

Soluble

**Solubility (other):**

No data available.

**Product name:** ECOCOOL S-CO 5 BF

|   |                                       |
|---|---------------------------------------|
| <b>Partition coefficient (n-octanol/water):</b> | Not applicable for mixtures           |
| <b>Autoignition Temperature:</b>                | not determined                        |
| <b>Decomposition Temperature:</b>               | not determined                        |
| <b>Kinematic viscosity:</b>                     | 5 mm <sup>2</sup> /s (40 °C)          |
| <b>Explosive properties:</b>                    | Value not relevant for classification |
| <b>Oxidizing properties:</b>                    | Value not relevant for classification |
| <b>Particle characteristics:</b>                | Not applicable                        |
| <b>9.2 Other information</b>                    | No data available.                    |

## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

### Information on likely routes of exposure

|                      |                         |
|----------------------|-------------------------|
| <b>Inhalation:</b>   | No data available.      |
| <b>Ingestion:</b>    | No data available.      |
| <b>Skin Contact:</b> | Causes skin irritation. |
| <b>Eye contact:</b>  | Causes eye irritation.  |

### 11.1 Information on toxicological effects

#### Acute toxicity

|                      |                     |
|----------------------|---------------------|
| <b>Oral Product:</b> | ATEmix: 2.071 mg/kg |
|----------------------|---------------------|

**Product name:** ECOCOOL S-CO 5 BF

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**Specified substance(s)**

acid, ionic equilibrium  
with organic bases LD 50 (Rat): 1.100 mg/kg

Glycerol LD 50 (Rat): 12.600 mg/kg

Triazole derivative LD 50 (Rat): 500 mg/kg

inorganic base, ionic  
equilibrium with acids LD 50 (Rat): 365 mg/kg

Potassium hydroxide LD 50 (Rat): 333 mg/kg

**Dermal**

**Product:** Not classified for acute toxicity based on available data.

**Specified substance(s)**

Glycerol LD 50 (Rabbit): > 18.700 mg/kg

**Inhalation**

**Product:** Not classified for acute toxicity based on available data.

**Skin Corrosion/Irritation:**

**Product:** Based on available data, the classification criteria are met.

**Serious Eye Damage/Eye Irritation:**

**Product:** Based on available data, the classification criteria are met.

**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.

**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.



Product name: ECOCOOL S-CO 5 BF

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Acute toxicity

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

#### Fish

##### Specified substance(s)

acid, ionic equilibrium  
with organic bases LC 50 (Fish, 96 h): 122 mg/l

Glycerol LC 50 (Fish, 96 h): > 10.000 mg/l

Triazole derivative LC 50 (Fish, 96 h): 180 mg/l (OECD 203)

Potassium hydroxide LC 50 (Fish, 96 h): 75 mg/l

quarternary ammonium  
compound LC 50 (Fish, 96 h): 0,047 mg/l

#### Aquatic Invertebrates

##### Specified substance(s)

acid, ionic equilibrium  
with organic bases EC 50 (Water Flea, 48 h): 68 mg/l

Glycerol EC 50 (Water Flea, 96 h): > 10.000 mg/l

Triazole derivative EC 50 (Water Flea, 48 h): 15,8 mg/l

Potassium hydroxide EC 50 (Water Flea, 48 h): 30 mg/l

quarternary ammonium  
compound EC 50 (Water Flea, 48 h): 0,37 mg/l

#### Chronic Toxicity

**Product:** Based on available data, the classification criteria are met.

#### Fish

##### Specified substance(s)

quarternary ammonium  
compound NOEC (Fish): 0,037 mg/l

#### Aquatic Invertebrates

##### Specified substance(s)

Triazole derivative NOEC (Water Flea, 21 d): 0,97 mg/l

quarternary ammonium  
compound NOEC (Water Flea): 0,08 mg/l

Product name: ECOCOOL S-CO 5 BF

**Toxicity to Aquatic Plants****Specified substance(s)**

acid, ionic equilibrium  
with organic bases

EC 50 (Alga, 72 h): 81 mg/l

Triazole derivative

NOEC (Alga, 72 h): 1,18 mg/l

**12.2 Persistence and Degradability****Biodegradation**

**Product:** Not applicable for mixtures

**Specified substance(s)**

Glycerol

Readily biodegradable

Triazole derivative

0,8 % (30 d) The product is heavily biodegradable.

**12.3 Bioaccumulative potential**

**Product:** Not applicable for mixtures

**Specified substance(s)**

Triazole derivative

Bioconcentration Factor (BCF): 4,14

**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.

**Water Hazard Class (WGK):**

WGK 1: slightly water-endangering.

**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.

**List of Waste (LoW) Codes**

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

Product name: ECOCOOL S-CO 5 BF

## SECTION 14: Transport information

### ADR/RID

- |                                    |                     |
|------------------------------------|---------------------|
| 14.1 UN number or ID 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: | —                   |

### IMDG

- |                                    |                     |
|------------------------------------|---------------------|
| 14.1 UN number or ID 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 or ID 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:

#### GB Regulations

**The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019:**  
none

**The Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020:**  
none

**Product name:** ECOCOOL S-CO 5 BF

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**15.2 Chemical safety assessment:**

No Chemical Safety Assessment has been carried out.

|                                      |
|--------------------------------------|
| <b>SECTION 16: Other information</b> |
|--------------------------------------|

**Revision Information:**

Vertical lines in the margin indicate an amendment.

**Wording of the H-statements in section 2 and 3**

|      |   |
|------|---|
| H290 | May be corrosive to metals.                           |
| H302 | Harmful if swallowed.                                 |
| H314 | Causes severe skin burns and eye damage.              |
| H315 | Causes skin irritation.                               |
| H318 | Causes serious eye damage.                            |
| H319 | Causes serious eye irritation.                        |
| 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 GB lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: On the basis of test data; Calculation Method; Bridging Principle "Substantially similar mixtures"; Expert Judgement

**Revision Date:**

14.12.2022

**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.