

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: PROCYCLE KÜHLFLÜSS. BIS-37°C

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

Identified uses: Antifreeze/coolant Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier	Fuchs Schmierstoffe GmbH Friesenheimer Str. 19 68169 Mannheim
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Fax:	+49 621 3701-570
Contact Person:	Fuchs Schmierstoffe GmbH Abteilung Produktsicherheit
Telephone:	+49 621 3701-1333
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1.4 Emergency telephone number:	+49 621 3701-1333 / +49 621 3701-0 (Mo-Do 8-17, Fr 8-16)

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		
Specific Target Organ Repeated Exposure	oxicity - Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Hazard summary Physical Hazards:	No data available.	
Label Elements Contains:	Ethanediol	

2.2





Signal Words:	Warning
Hazard Statement(s):	H373: May cause damage to organs through prolonged or repeated exposure.
Precautionary Statemen	ts
Prevention:	P260: Do not breathe dust/fume/gas/mist/vapours/spray.
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 the substances listed below with harmless additions. This product is applied only as solution or emulsion in water.

Chemical name	Identifier		REACH Registration No.	Notes
Ethanediol	EINECS: 203-473-3	50,00 - <100,00%	01-2119456816-28	
sodium borate	EINECS: 215-540-4	1,00 - <5,00%		**

* 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

Classification

Chemical name	Identifier	Classification	
Ethanediol	EINECS: 203-473-3	CLP:	Acute Tox. 4;H302, STOT RE 2;H373
sodium borate	EINECS: 215-540-4	CLP:	Repr. 1B;H360FD

CLP: Regulation No. 1272/2008.

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:

Promptly wash eyes with plenty of water while lifting the eye lids.



Skin Contact:	Wash with soap and water.
Ingestion:	Rinse mouth thoroughly.
4.2 Most important symptoms and effects, both acute and delayed:	May cause skin and eye irritation.
4.3 Indication of any immediate medical attention and special treatment needed	Get medical attention if symptoms occur.
SECTION 5: Firefighting measures	5
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 inaccordance 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 me	easures
6.1 Personal precautions, protective equipment and emergency procedures:	In case of spills, beware of slippery floors and surfaces.
6.2 Environmental Precautions:	Prevent from spreading (e.g. by binding or oil barriers). Avoid release to the environment. Environmental manager must be informed of all major spillages. Prevent further leakage or spillage if safe to do so. Do not allow to enter drainage system, surface or ground water.
6.3 Methods and material for containment and cleaning	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.

up:



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.
SECTION 7: Handling and storage):
7.1 Precautions for safe handling:	Prevent formation of aerosols. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. 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.
7.3 Specific end use(s):	Not applicable
Storage Class:	10, Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Туре	Exposure Lim	it Values	Source
Ethanediol - Vapor.	TWA	20 ppm	52 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Ethanediol - Vapor.	STEL	40 ppm	104 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Ethanediol - Particulate.	TWA		10 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
sodium borate	TWA		1 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
sodium borate	TWA		1 mg/m3	UK. EH40 Workplace Exposure Limits (WELs) (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 inhandling the chemicals or the mineral oil products.



Eye/face protection:	Safety glasses (EN 166) recommended during refilling. 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-butadiene rubber (NBR). Min. Breakthrough time: >= 480 min Recommended thickness of the material: >= 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
Color:	Blue
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	7,0 - 9,0 (1.000 g/l)
Freezing point:	Not applicable for mixtures
Boiling Point:	Value not relevant for classification
Flash Point:	Not applicable
Evaporation Rate:	Not applicable for mixtures
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:	1,07 g/cm3 (15 °C)
Solubility(ies)	



Solubility in Water:	Miscible with water.
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
Flow time	Value not relevant for classification
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

11.1 Information on toxicological effects

Acute toxicity

Oral Product: Specified substance(s) Ethanediol	ATEmix: 3.177 mg/kg
	LD 50 (Human): 1.600 mg/kg
sodium borate	LD 50 (Rat): > 2.500 mg/kg (OECD 401)
Dermal Product:	
Specified substance(s) Ethanediol	Not classified for acute toxicity based on available data.
	LD 50 (Mouse): 3.500 mg/kg
Inhalation Product:	Not clossified for courts toxisity based on sysilable data
	Not classified for acute toxicity based on available data.
Skin Corrosion/Irritation: Product:	Based on available data, the classification criteria are not met.



Serious Eye Damage/Eye Ir Product:	ritation: Based on available data, the classification criteria are not met.
Respiratory or Skin Sensiti: Product:	zation: Skin sensitizer: Based on available data, the classification criteria are not met. Respiratory sensitizer: Based on available data, the classification criteria
	are not met.
Specified substance(s) Ethanediol	
	No sensitizing effect (guinea pig); OECD 406
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 Toxic Product:	city - Single Exposure Based on available data, the classification criteria are not met.
Specific Target Organ Toxic Product:	city - Repeated Exposure Based on available data, the classification criteria are met.
Aspiration Hazard Product:	Based on available data, the classification criteria are not met.
Other adverse effects:	No data available.
SECTION 12: Ecological information	tion
12.1 Toxicity	
Acute toxicity Product:	Based on available data, the classification criteria are not met.
Fish Specified substance(s) Ethanediol	LC 50 (Fish, 96 h): 72.860 mg/l
Aquatic Invertebrates Specified substance(s)	(, , G
Ethanediol	EC 50 (Water Flea, 48 h): > 100 mg/l (OECD 202)

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

Fish Specified substance(s) Ethanediol

NOEC (Fish, 7 d): 15.380 mg/l



Aquatic Invertebrates Specified substance(s) Ethanediol	NOEC (Water Flea, 7 d): 8.590 mg/l	
12.2 Persistence and Degradability		
Biodegradation Product: Specified substance(s) Ethanediol	Not applicable for mixtures > 90 % (10 d, OECD 301A) The product is easily biodegradable.	
12.3 Bioaccumulative potential Product:	Not applicable for mixtures	
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:	No data available.	
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:	Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are absorbed.	

European Waste Codes

16 01 14*: antifreeze fluids containing dangerous substances

SECTION 14: Transport information

ADR/RID 14.1 UN Number: 14.2 UN Proper Shipping Name: 14.3 Transport Hazard Class(es)	Ξ
Class: Label(s): Hazard No. (ADR): Tunnel restriction code:	Non-dangerous goods – – –
14.4 Packing Group: 14.5 Environmental hazards:	

mixing instructions are observed.



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:	-
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:	_
ΙΑΤΑ	
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

15.2 Chemical safety No Chemical Safety Assessment has been carried out. **assessment:**

SECTION 16: Other information

Revision Information:

Vertical lines in the margin indicate an amendment.



Wording of the H-statements in section 2 and 3

H302 H360FD H373	Harmful if swallowed. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.
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: Disclaimer:	14.05.2019 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.