

SAFETY DATA SHEET

acc.to ISO/DIS 11014 for USA

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: MAINTAIN FRICOFIN

Other means of identification: For further information, please refer to section 9 of the SDS.

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

Fuchs Schmierstoffe GmbH
Friesenheimer Str. 19
68169 Mannheim

US Distributor

Fuchs Lubricants Co.
17050 Lathrop Avenue
Harvey, IL 60426

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Contact Person:

Fuchs Schmierstoffe GmbH Abteilung Produktsicherheit

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1.4 US contact telephone :

708-333-8900

Emergency telephone:

800-255-3924

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to the legislation in force.

Health Hazards

Acute toxicity (Oral) Category 4

Toxic to reproduction Category 2

Specific Target Organ Toxicity - Repeated Exposure Category 2

Product name: MAINTAIN FRICOFIN

Hazard summary

Physical Hazards: No data available.

2.2 Label Elements



Signal Words: Warning

Hazard Statement(s): H302: Harmful if swallowed.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention: P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P281: Use personal protective equipment as required.
P260: Do not breathe dust or mists.

Response: P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell.
P330: Rinse mouth.
P308+P313: If exposed or concerned: Get medical advice/attention.

Storage: P405: Store locked up.

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.

Unknown toxicity: Due to information available product does not contain any ingredients of unknown toxicity.

Product name: MAINTAIN FRICOFIN

3 COMPOSITION / INFORMATION ON INGREDIENTS

General information: Mixture of the substances listed below with harmless additions.

Chemical name	Identifier	Concentration *	Notes
Ethanediol	107-21-1	50.00 - <100.00%	
Na-salt of carboxylic acid	19766-89-3	1.00 - <3.00%	
sodium borate	12179-04-3	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	Classification
Ethanediol	107-21-1 Acute Tox. 4;H302, STOT RE 2;H373
Na-salt of carboxylic acid	19766-89-3 Repr. 2;H361d
sodium borate	12179-04-3 Repr. 1B;H360FD, Eye Irrit. 2;H319

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. Call a POISON CENTER/doctor/ if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

4.3 Indication of any immediate medical attention and special treatment needed Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

Product name: MAINTAIN FRICOFIN

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:

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 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: MAINTAIN FRICOFIN

SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. 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.
- 7.3 Specific end use(s):** not applicable

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1.Exposure Limits

Chemical name	Type	Exposure Limit Values	Source
Ethanediol	Ceiling	50 ppm 125 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Ethanediol - Aerosol.	Ceiling	100 mg/m3	US. ACGIH Threshold Limit Values (02 2012)
sodium borate	TWA	10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
sodium borate - Inhalable fraction.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (02 2012)
sodium borate - Inhalable fraction.	STEL	6 mg/m3	US. ACGIH Threshold Limit Values (02 2012)

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: Safety glasses (EN 166) recommended during refilling.

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Skin protection

Hand Protection:

Material: Nitrile butyl 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:

No data available.

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.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	Various
Odor:	Characteristic
Odor Threshold:	Not applicable for mixtures
pH:	7.2 (, 20 °C)
Freezing point:	Not applicable for mixtures
Boiling Point:	> 165 °C
Flash Point:	120 °C
Evaporation Rate:	Not applicable for mixtures
Flammability (solid, gas):	Value not relevant for classification
Flammability Limit - Upper (%)–:	Not applicable for mixtures
Flammability Limit - Lower (%)–:	Not applicable for mixtures

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Vapor pressure:	Not applicable for mixtures
Vapor density (air=1):	Not applicable for mixtures
Density:	1.12 g/cm ³ (20 °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:	20 - 30 mm ² /s (20 °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.

11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	Harmful if swallowed.
Skin Contact:	No data available.
Eye contact:	No data available.

Product name: MAINTAIN FRICOFIN

Acute toxicity

Oral

Product: LD 50 (Human): 1,600 mg/kg
Specified substance(s)
Ethanediol LD 50 (Human): 1,600 mg/kg

Dermal

Product:
Specified substance(s)
Ethanediol LD 50 (Mouse): 3,500 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 not met.

Serious Eye Damage/Eye Irritation:

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

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.

IARC: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

NTP: US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

OSHASp: US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Product name: MAINTAIN FRICOFIN

No carcinogenic components identified

Reproductive toxicity

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

Aspiration Hazard

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

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

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

Fish

Product: LC 50 (Fish, 96 h): > 101 mg/l

Aquatic Invertebrates

Product: EC 50 (Water Flea, 48 h): > 101 mg/l

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

Fish

Specified substance(s)

Ethenediol NOEC (Fish, 7 d): 15,380 mg/l

Aquatic Invertebrates

Specified substance(s)

Ethenediol NOEC (Water Flea, 7 d): 8,590 mg/l

Toxicity to Aquatic Plants

Product: EC 50 (Alga, 72 h): > 101 mg/l

12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

Product name: MAINTAIN FRICOFIN

Specified substance(s)

Ethenediol > 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.

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.

14 TRANSPORT INFORMATION

DOT

Not regulated.

IMDG - International Maritime Dangerous Goods Code

Not regulated.

IATA

Not regulated.

15 REGULATORY INFORMATION

US Federal Regulations

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Inventory Status

TSCA	On or in compliance with the inventory
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Product name: MAINTAIN FRICOFIN

16 OTHER INFORMATION

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the R-phrases and H-statements in section 2 and 3

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Revision Date: 10.11.2017

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.