### Safety data sheet

Page: 1/13

Eurolub Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 26.01.2017

Version: 3.4

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

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

1.1. Product identifier

#### Eurolub Kühlerschutz FGMR Ultra

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

Relevant identified uses: engine coolant

1.3. Details of the supplier of the safety data sheet

Company: Eurolub GmbH Freisinger Str. 25 - 27 85386 Eching - GERMANY

Telephone: +49 (0) 8165 / 9591-0 E-mail address: info@eurolub.com

#### 1.4. Emergency telephone number

International emergency number: Telephone: +49 (0) 8165 / 9591-0

#### **SECTION 2: Hazards Identification**

#### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 (oral) STOT RE (Kidney) 2

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

H302, H373

For the classifications not written out in full in this section the full text can be found in section 16.

#### 2.2. Label elements

Globally Harmonized System, EU (GHS)

#### Pictogram:



## Signal Word: Warning

Hazard Statement:

H302 Harmful if swallowed.

H373 May cause damage to organs (Kidney) through prolonged or repeated

exposure.

Precautionary Statements (Prevention):

P260 Do not breathe dust/gas/mist/vapours.

P270 Do not eat, drink or smoke when using this product.

P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P314 Get medical advice/attention if you feel unwell.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you

feel unwell.

P330 Rinse mouth.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

#### According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: ETHANE-1,2-DIOL/ETHYLENEGLYCOL

#### 2.3. Other hazards

#### According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

#### **SECTION 3: Composition/Information on Ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

#### Chemical nature

ethanediol; ethylene glycol

inhibitors

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

ethanediol; ethylene glycol

Content (W/W): > 90 % Acute Tox. 4 (oral) CAS Number: 107-21-1 STOT RE (Kidney) 2

EC-Number: 203-473-3 H302, H373

REACH registration number: 01-

2119456816-28

INDEX-Number: 603-027-00-1

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

#### **SECTION 4: First-Aid Measures**

#### 4.1. Description of first aid measures

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position).

#### If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

#### On skin contact:

Wash thoroughly with soap and water. Seek medical attention.

#### On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

Rinse mouth immediately and then drink plenty of water, seek medical attention. Administer 50 ml of pure ethanol in a drinkable concentration.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

#### **SECTION 5: Fire-Fighting Measures**

#### 5.1. Extinguishing media

Suitable extinguishing media:

water spray, dry powder, alcohol-resistant foam

#### 5.2. Special hazards arising from the substance or mixture

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

#### 5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

#### Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

#### **SECTION 6: Accidental Release Measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

#### 6.2. Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

#### 6.3. Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

#### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

#### **SECTION 7: Handling and Storage**

#### 7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Shut containers immediately after taking product because product takes up the humidity of air.

Protection against fire and explosion:

No special precautions necessary.

#### 7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Storage in galvanized containers is not recommended.

#### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

#### **SECTION 8: Exposure Controls/Personal Protection**

#### 8.1. Control parameters

#### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Combination filter for gases/vapours of organic compounds and solid and liquid particles (f.e. EN 14387 Type A-P2)

#### Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

nitrile rubber (NBR) - 0.4 mm coating thickness

Manufacturer's directions for use should be observed because of great diversity of types.

#### Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### General safety and hygiene measures

Do not inhale gases/vapours/aerosols. Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

#### Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

#### **SECTION 9: Physical and Chemical Properties**

#### 9.1. Information on basic physical and chemical properties

Form: liquid

Colour: according to specification

Odour: product specific

Odour threshold:

No applicable information available.

pH value: 8.2 - 8.6

solidification temperature: < -18 °C (DIN ISO 3016)
Boiling point: > 160 °C (ASTM D1120)

Flash point: > 124 °C (DIN EN 22719; ISO 2719)

Evaporation rate:

Value can be approximated from Henry's Law Constant or vapor

pressure.

Flammability: not flammable

Lower explosion limit: 3.4 %(V) (air)

(20 °C)

Upper explosion limit: 15.1 %(V) (air)

(20 °C)

Ignition temperature: 420 °C (DIN 51794)

Vapour pressure: 0.2 mbar

(20 °C) 13 mbar (50 °C) 1.124 g/cm3

Density: 1.124 g/cm3

(20 °C)

Solubility (qualitative) solvent(s): polar solvents

soluble

Partitioning coefficient n-octanol/water (log Kow):

Study scientifically not justified.

Self ignition: not self-igniting

Thermal decomposition: No decomposition if correctly stored and handled. Viscosity, kinematic: 20 - 30 mm2/s (DIN 51562)

(20 °C)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

#### 9.2. Other information

Miscibility with water:

miscible in all proportions

Other Information:

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

If necessary, information on other physical and chemical parameters is indicated in this section.

#### **SECTION 10: Stability and Reactivity**

#### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

#### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

#### 10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

#### 10.4. Conditions to avoid

No conditions to avoid anticipated.

#### 10.5. Incompatible materials

Substances to avoid:

strong oxidizing agents, alkali metal hydroxides

#### 10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

#### **SECTION 11: Toxicological Information**

#### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Of low toxicity after short-term skin contact.

Experimental/calculated data:

LD (human) (oral): approx. 1,600 mg/kg

#### Irritation

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

Respiratory/Skin sensitization

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies. Human data do not fully exclude a skin sensitizing potential.

#### Germ cell mutagenicity

Assessment of mutagenicity:

Based on the ingredients, there is no suspicion of a mutagenic effect.

#### Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

#### Reproductive toxicity

No data available.

#### Developmental toxicity

Information on: ethanediol; ethylene glycol

Assessment of teratogenicity:

In animal studies the substance caused malformations when given at high doses.

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#### Specific target organ toxicity (single exposure)

No data available.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Information on: ethanediol; ethylene glycol

Assessment of repeated dose toxicity:

The substance may cause damage to the kidney after repeated ingestion. The substance may cause damage to the kidney after repeated skin contact with high doses.

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#### Aspiration hazard

No data available.

#### Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

#### **SECTION 12: Ecological Information**

#### 12.1. Toxicity

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

Toxicity to fish:

LC50 (96 h) > 100 mg/l, Leuciscus idus

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, Daphnia magna

Aquatic plants:

EC50 (72 h) > 100 mg/l, algae

Microorganisms/Effect on activated sludge:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

#### 12.2. Persistence and degradability

Elimination information:

> 70 % DOC reduction (28 d) (OECD 301 A (new version)) Readily biodegradable.

#### 12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

Accumulation in organisms is not to be expected.

#### 12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

#### 12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

#### 12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

#### 12.7. Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Other ecotoxicological advice:

The product has not been tested. The statement has been derived from the properties of the individual components.

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

Do not release untreated into natural waters.

#### **SECTION 13: Disposal Considerations**

#### 13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

The waste codes are manufacturer's recommendations based on the designated use of the product. Other use and special waste disposal treatment on customer's location may require different waste-code assignments.

Waste key:

16 01 14<sup>pt</sup> antifreeze fluids containing dangerous substances

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

#### **SECTION 14: Transport Information**

#### Land transport

**ADR** 

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable

user

RID

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

#### **Inland waterway transport**

ADN

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user:

Transport in inland waterway vessel

Not evaluated

#### Sea transport

**IMDG** 

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable

user

#### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

#### 14.1. UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

#### 14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

#### 14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### 14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### 14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### 14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation: Not evaluated Shipment approved: Not evaluated Pollution name: Not evaluated Pollution category: Not evaluated Ship Type: Not evaluated

#### **SECTION 15: Regulatory Information**

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

#### 15.2. Chemical Safety Assessment

Chemical Safety Assessment not yet performed due to registration timelines

#### **SECTION 16: Other Information**

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Acute Tox. 4 (oral) STOT RE (Kidney) 2

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox. Acute toxicity

STOT RE Specific target organ toxicity — repeated exposure

H302 Harmful if swallowed.

Product: Eurolub Kühlerschutz FGMR Ultra

Date of print 28.01.2017

H373

May cause damage to organs (Kidney) through prolonged or repeated exposure.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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