

SAFETY DATA SHEET

according to regulation 1907/2006/EC (REACH) and 1272/2008/EC



Trade name: **A.Z. Meisterteile Kühlerfrostschutz KFS 12-72**

Version: 1

Latest revision:

Date of issue: 13. 11. 2017

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

1.1 Product identifier:

A.Z. Meisterteile Kühlerfrostschutz KFS 12-72

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

Relevant identified uses: coolant concentrate

Uses advised against: no data

1.3 Details of the supplier of the safety data sheet:

Trader identification:

UNIX Autó és Alkatrészkereskedelmi Kft.

H-1139 Budapest, Frangepán u. 55-57.

Tel.: 06 1 270 8700

Fax: 06 1 270 8799

E-mail: info@unixauto.hu

Technical information:

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E-mail: info@unixauto.hu

1.4 Emergency telephone number

Emergency telephone (07-15²⁰ h): +36 34 526 210 (CET) on workdays

Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.)

Tel.: 36 80 201 199 (0-24 h, free number).

National Health Toxicological Information Service:

SECTION 2 Hazards identification

2.1 Classification of the mixture or substance

Hazard Class and Category:

Acute Tox. 4

Repr. 2

STOT RE 2

Hazard statement:

H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

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2.2 Label elements

Product identification: Trade name: **A.Z. Meisterteile Kühlerfrostschutz KFS 12-72**

Hazardous component(s): Ethanediol(CAS: 107-21-1)
2-ethyl-hexanoic acid, sodium salt (CAS: 19766-89-3)

GHS Pictogram:



Signal word:

Warning

Hazard statement:

H302 Harmful if swallowed

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

Supplemental hazard information: -

Precautionary statements – General:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of the reach of children.

Precautionary statements - Prevention

P260 Do not breathe mist/vapours/spray.

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

Precautionary statements - Response

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

P330 Rinse mouth.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Precautionary statements – Storage: -

Precautionary statements - Disposal

P501 Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:

Tactile warning of danger: in case of distribution for population.

Transport classification: see section 14.

2.3 Other hazards

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

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SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: Ethylene glycol with additives, colorific.

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Ethanediol REACH Registr.Nr.: 01-2119456816-28	203-473-3	107-21-1	Acute Tox. 4 STOT RE 2	H302 H373	max. 98
2-ethyl-hexanoic acid, sodium salt	243-283-8	19766-89-3	Repr. 2	H361d	max. 7.5

The full text of each relevant H- phrase and Hazard classes and cat. see in Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

General information: Never give anything by mouth to an unconscious person, or never induce vomiting.

Inhalation: Remove exposed person to fresh air if adverse effects are observed. If breathing has stopped, apply artificial respiration. If breathing is labored, administer oxygen. Get medical attention.

Skin contact: Wash immediately with soap and water. If symptoms persist (redness, swelling, pain, blister) get medical attention.

Eye contact: Flush immediately with plenty of running water for at least 15 minutes, holding the eyelids open. Rest the eyes at least 30 minutes. If symptoms persist (redness, burning pain, dim-red sight, swelling) get medical attention.

Ingestion: Wash out the mouth immediately with water. Give plenty of water. Do not induce vomiting! If vomiting occur spontaneously, lower head below waist to prevent fluid entering the lungs. Get medical attention.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. May cause damage to the central nervous system (headache, dizziness, nausea, vomiting, drowsiness, confusion, involuntary eye movements) and the kidneys.

Suspected of damaging the unborn child.

4.3 Indication of any immediate medical attention and special treatment need

If swallowed, immediate medical attention is required: 2 hours, gastrolavage, etc.

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SECTION 5 Fire-fighting measures

Fire hazards:
Combustible.

5.1 Extinguishing media

Suitable extinguishing media:

According to the existing fire-fighting regulations: powder, alcohol resistant foam, water, CO₂.

Unsuitable extinguishing media:

No data.

5.2 Special hazards arising from the mixture or substance

Hazardous combustion products:

On burning hazardous gases and vapours (carbon-dioxide, carbon-monoxide, other organic compounds) can be formed.

5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Self-contained breathing apparatus.

Further information:

Cool containers and surroundings exposed to fire with water spray.

Vapours of ethanediol ethylene glycol heavier than air and form explosive mixture with air.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

6.2 Environmental precautions:

Prevent spills from entering into natural water, soil and drains by containing the liquid.

Notify relevant authority.

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6.3 Methods and material for containment and cleaning up

- On soil: Exclude source of ignition. Adequate ventilation required in enclosed areas. Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid by pumping. Dispose of according to local regulations. Clean up with large amount of water the contaminated area.
- On water: Notify local authorities according to regulations.

6.4 Reference to other sections

- Personal precautions: see section 8.
- Waste treatment methods: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Keep general measures applied for normal operations with chemicals and flammable liquids.
- Adequate ventilation required.
- Keep material away from and open flame. No smoking.
- Avoid contact with skin and eyes, inhalation of vapours.
- Ensure washing facilities after working hours and before breaks. Take off contaminated clothing, wash with warm water and soap.
- Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.
- Handling temperature: no data

7.2 Conditions for safe storage, including any incompatibilities

- Storage facilities must comply with regulations for storing of chemicals and flammable liquids.
- Keep material away from heat, sparks, and open flame. Store in cool, dry, well-ventilated area, in original, tightly closed containers.
- Keep out of the reach of children. Keep away from food, drink.
- Unsuitable storage materials are: not recommended using plated or galvanized iron or steel containers.
- Storage temperature: -13 – +35°C

7.3 Specific end use(s)

- Coolant concentrate.

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SECTION 8 Exposure controls / personal protection

Engineering control measures:

Not required.

8.1 Control parameters:

EU (2000/39/EC)

<i>Ethanediol:</i>	Eight hours:	52 mg/m ³
	Short-term:	104 mg/m ³

8.2 Exposure controls

Personal protection:

Respiratory protection: Under normal use conditions, respirator is not usually required. Use approved breathing apparatus if vapours, mists and aerosols are generated or recommended exposure limits are exceeded.

Hand protection: Protective gloves (chemical resistant) (EN 374).
Note: Manufacturer's directions for use and the conditions of application should be observed.

Eye protection: Chemical goggles.

Skin protection: Protective clothing, possibly chemical resistant protective boots.

Other special: No data.

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: liquid

Colour: violet

Odour: mild

Change in physical state:

Crystallisation temperature (1:1) (ASTM D 1177):

typ. -19°C

Boiling point (ASTM D 1120):

typ. 180°C

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Others:

Flash point (COC) (ASTM D 92):	typ. 128°C
Ignition point:	no data
Flammability:	no data
Explosion limits: lower/upper:	no data
Decomposition temperature:	unknown
Oxidizing properties:	no data
Vapour pressure at 20°C:	no data
Density at 20°C(ASTM D 1122):	1.110 – 1.115 g/cm ³
Solubility in water at 20°C:	soluble in all proportion
Thermal decomposition:	no data
n-Octanol/water partition coefficient:	no data
Kinematic viscosity at 20°C:	no data
pH (ASTM D 1187):	typ. 8.6

9.2 Other information

no data available

SECTION 10 Stability and reactivity

10.1 Reactivity:	Dangerous reactivity not known.
10.2 Chemical stability:	No decomposition if stored and handled properly.
10.3 Possibility of hazardous reactions:	Not known.
10.4 Conditions to avoid:	Direct heat or ignition sources.
10.5 Incompatible materials:	Strong oxidizing agents.
10.6 Hazardous decomposition products:	No dangerous decomposition products are formed under normal conditions. Hazardous combustion products: See Section 5.
Nota:	Vapours of ethanediol heavier than air and form explosive mixture with air.

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SECTION 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity: No data for the product.

Ethanediol:

Oral: LD (human): 1200-1500 mg/kg

Oral (OECD 401):	LD ₅₀ (rat):	5840	mg/kg
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LD₅₀ (guinea pig): 6610 mg/kg

LD₅₀ (mouse): 2780 mg/kg

Dermal (OECD 402): LD₅₀ (rabbit): 9530 mg/kg

Note: The main component is ethanediol symptoms of glycol poisoning: breathing disorders, paralysis of central nervous system and in case of severe toxicosis may be fatal.

May cause vomiting when ingested. Aspiration into the lungs may cause chemical pneumonitis. May produce central nervous system disorders.

Absorb on skin.

Vapours may cause narcosis.

In aerosol form in eyes can cause blindness.

Acute toxicity: irritation

Inhalation: not irritant (based on components)

Note: Elevated temperatures, mixing or mechanical action may form mists, which may cause slightly burning effects in nose, throat and lungs.

Skin contact: not irritant (based on components)

Note: Prolonged and/or repeated contact may cause slight irritation: transient burning effects, mild local redness on skin and/or swelling. Risk of skin resorption.

In case of short term contact is not expected to other unlikely effects.

Eye contact: not irritant (based on components)

Note: May cause slight irritation: transient burning effects, mild redness and/or dim sight.

Respiratory or skin sensitisation: not sensitising (based on components)

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Other information, specific effects:

Germ cell mutagenicity:	not known, resp. not mutagen (based on components)
Carcinogenicity:	not known, resp. not carcinogen (based on components)
Reproductive toxicity:	Suspected of damaging the unborn child.
STOT-single exposure:	not classified
STOT-repeated exposure:	Suspected of damaging the unborn child.
Aspiration hazard:	Harmful if swallowed. May cause vomiting when ingested. Aspiration into the lungs may cause chemical pneumonitis.

SECTION 12 Ecological information

12.1 Toxicity No data available for the preparation.

Ethanediol:

Aquatic organisms:	Fish toxicity:	LC ₅₀	>100 mg/l	(Literature)
	Daphnia toxicity:	EC ₅₀	>100 mg/l	(Literature)
	Algae toxicity:	IC ₅₀	>100 mg/l	(Literature)
Soil organisms:	Bacteria toxicity:		>1000 mg/l	(Literature)

12.2 Persistence and degradability

Biodegradability: Readily degradable. (Literature)

12.3 Bioaccumulative potential

Has low bioaccumulation (ethylene glycol)

12.4 Mobility

Mobility in soil: Large spills to soil can contaminate groundwater.
Mobility in water: In water is fully dissolved.

12.5 Results of PBT and vPvB assessment

Does not contain PBT and vPvB substances.

12.6 Other adverse effects

Biological oxygen demand:	<i>Ethanediol:</i>	BOD:	0.81 g/g	(Literature)
Chemical oxygen demand:	<i>Ethanediol:</i>	COD:	1.29 g/g	(Literature)
Heavy metal content:	None.			
PCT, PCB and other chlorinated hydrocarbons:	None.			
Effects on activated sludge:	The product can be disposed in wastewater treatment plant – biological stage of treatment (activation) after dilution in the ratio 1:1000 and after approval of relevant authority and manager of the sewer.			
Environmental effects:	Do not empty into waterways without disposal.			
Water hazard class (German):	WGK 1 (Classification by VwVwS)			

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SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.

Waste Identification Code: 16 01 14*

Antifreeze fluids containing dangerous substances.

Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: incineration

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

Waste Identification Code: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Disposal must be in compliance with national and local regulations.

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

SECTION 14 Transport information

Land transport:

Road/ Railway

ADR/RID:

Not classified.

- | | | |
|-------|-------------------------------|---|
| 14.1. | UN number: | - |
| 14.2. | UN proper shipping name: | - |
| 14.3. | Transport hazard class(es): | - |
| 14.4. | Packing group: | - |
| 14.5. | Environmental hazards: | - |
| 14.6. | Special precautions for user: | - |

Waterways:

Inland waterways/ Sea transport

ADN/IMDG:

Not apply to the product.

Air transport: ICAO / IATA:

Not apply to the product.

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SECTION 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the mixture.
This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2015/830/EU) and to Regulation (EC) 1272/2008.
- 15.2 Chemical safety assessment.
not available

SECTION 16 Other information

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract.

The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Source of data presented in this material safety data sheet:

Test results of this product

Material safety data sheets of product's components

1272/2008/EC regulation, Annex XVII. of REACH

Relevant Hungarian regulation and EU directives

Classification for mixtures and used evaluation method according to regulation 1272/2008/EC (CLP)

Acute Tox. 4	H302	calculated method
STOT RE 2	H373	calculated method
Repr. 2	H361d	calculated method

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The full text of each relevant H- phrase and Hazard classes and cat. in Section 3.:

H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Acute Tox. 4	Acute toxicity Category 4
Repr. 2	Reproductive toxicity Category 2
STOT RE 2	Specific target organ toxicity – repeated exposure Category 2

Legend:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labeling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic or toxic to Reproduction
COD	Chemical Oxygen Demand
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
ECHA	European Chemicals Agency
Ec _x	Effective Concentration x%
Ed _x	Effective Dose x%
ELINCS	European List of Notified Chemical Substances
ErC ₅₀	EC ₅₀ in terms of reduction of growth rate;
ES	Exposure Scenario
ESIS	European Chemical Substances Information System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC _x	Lethal Concentration x%
LD _x	Lethal Dose x%
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LC _x	Lethal Concentration x%

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LDx	Lethal Dose x%
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
NOEC	No observed effect concentration
NOEL	No observed effect level
NLP	No-Longer Polymer
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SVHC	Substance of Very High Concern
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bio-accumulative

Revision Indicators:

Section	Subject of change	Date	Version