

Trade name: A.Z. Meisterteile Kühlerfrostschutz KFS 11-72

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

- 1.1 Product identifier: A.Z. Meisterteile Kühlerfrostschutz KFS 11-72
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses: coolant concentrate Uses advised against: application other than the above.
- 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: cs@unixauto.com

Responsible for SDS: UNIX Autó és Alkatrészkereskedelmi Kft. H-1139 Budapest, Frangepán u. 55-57. Tel.: 06 1 270 8700 Fax: 06 1 270 8799 E-mail: cs@unixauto.com Technical information: UNIX Autó és Alkatrészkereskedelmi Kft. H-1139 Budapest, Frangepán u. 55-57. Tel.: 06 1 270 8700 Fax: 06 1 270 8799 E-mail: cs@unixauto.com

1.4 Emergency telephone number

Emergency telephone (on workdays: 07-15²⁰ h (CET)): +36 1 270 8700 Health Toxicological Information Service (ETTSZ 1097 Budapest, Albert Flórián st. 2-6.) Tel.: +36 80 201 199 (0-24 h, free number, can only be called from Hungary). +36 1 476 6464 (0-24 h, can be called for a normal fee - also from abroad) National Health Toxicological Information Service:

SECTION 2 Hazards identification

2.1	1 Classification of the substance or mixture						
	Hazard Class and Category:	Hazard statement:					
	Acute Tox. 4	H302	Harmful if swallowed.				
	STOT RE 2	H373	May cause damage to kidneys through prolonged or repeated exposure.				
			1 1				

SAFETY	DATA	SHEET



Tra	Trade name: A.Z. Meisterteile Kühlerfrostschutz KFS 11-72							
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2.2	Label element	S						
	Product identi	fication: Trade name:	A.Z. Meisterteile Kühlerfrosts	chutz KFS 11-72				
	Hazardous con	mponent(s): Ethanediol						
	GHS Pictogram		>					
	Signal word:	Warning						
	Hazard statem	ent:						
	H302 H373	Harmful if swalle May cause damag		repeated exposure				
	Supplemental hazard information: -							
	Precautionary statements – General: P101 If medical advice is needed, have product container or label at h							
	P102 Keep out of the reach of children.							
	Precautionary statements - Prevention							
	P260 P264	Do not breathe mis	t, vapours, spray. a areas thoroughly after handling					
	P270	-	r smoke when using this product.					
	Precautionary	statements - Response						
	P301 + P310	IF SWALLOWE doctor/physician.	D: Immediately call a POIS	ON CENTER or				
	Precautionary statements – Storage: -							
	Precautionary statements - DisposalP501Dispose of contents/container in accordance with national regulation.							
	Tactile warnin		f 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 reg (EC) 1907/2006, at a concentration of 0.1% or more. The mixture does not contain any substance with endocrine disrupting properties concentration of 0.1% or more. 								



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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	EC 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 RE2	H302 H373	80-98
Methyl-1H-benzotriazole REACH Registr. Nr.: 01-2119979081-35	249-596-6	29385-43-1	Acute Tox.4 Repr.2 Aquatic Chronic 2	H302 H361d H411	0.1 - <0.25
Potassium - (2- benzothiazylthio)acetate REACH Registr. Nr.: no data	-	-	Acute Tox. 4 Eye Dam. 1 Repr. 2 Aquatic Chronic 3	H302 H318 H361 H412	0.1 - <0.25

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, bladder) 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.



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- 4.2 Most important symptoms and effects, both acute and delayed Harmful if swallowed.
 May cause damage to kidneys through prolonged or repeated exposure.
 Other symptoms: convulsions, dizziness. nausea, vomiting, abdominal pain, oedema.
- 4.3 Indication of any immediate medical attention and special treatment needed If swallowed, immediate medical attention is required: 2 hours, gastric lavage, etc.

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, CO₂

Unsuitable extinguishing media: Full water jet.

- 5.2 Special hazards arising from the substance or mixture 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. Keep unnecessary personnel away. Sufficient ventilation should be provided.
- 6.2 Environmental precautions: Prevent spills from entering into natural water, soil and drains by containing the liquid. Notify relevant authority.

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



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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, ground limestone powder, vermiculite or other non-combustible 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 and wash it before reuse.

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: $-13 - +35^{\circ}C$

7.3 Specific end use(s)

Coolant concentrate.

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



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8.1	Con	trol parame	eters:	
]	Long-term	- ,	-21-1) 8-hour TWA reference period): 20 ppm / 52 mg/m ³ 15-minute reference period): 40 ppm / 104 mg/m ³
8.2	Expo	osure contr	ols	
	-	neering con Not require	ntrol measures: ed.	
	Pers	onal protec	tion:	
	. ,	Eye/face pi Skin protec		Protective goggles or face shield (EN 166).
		-	nd protection	Protective gloves (chemical resistant) (EN 374). Material: nitrile, neoprene, butyl viton. Layer thickness: min. 0.38 mm.Breakthrough time: min. 480 min.Note: Manufacturer's directions for use and the conditions of application should be observed.
		(ii) Oth	her	Protective clothing, possibly chemical resistant protective boots.
	(c)]	Respiratory	y 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.
	(d) '	Thermal ha	zards	Heat-resistant protective clothing if necessary.
			exposure contro charge into drain	ls: s/surface waters/groundwater.

) Physical state:	liquid
) Colour:	dark blue
) Odour:	mild
) Melting point/freezing point (Pour point) (ISO 30)	16): not available
) Boiling point or initial boiling point and boiling ra	nge
(ASTM D 1120):	typ. 174°C
Flammability:	combustible
) Lower and upper explosion limit:	not available

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



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	h)	Flash point (COC) (EN ISO 2592	2):	typ. 120°C	
	i)	Auto-ignition temperature:	not available		
	j)	Decomposition temperature:	not available		
	k)	pH (ASTM D 1287):	typ. 8.5		
	l)	Kinematic viscosity (EN ISO 31)	04)		
			40°C:	not available	
		at	100°C	not available	
	m)	Solubility			
		Solubility in water:		soluble in all proportion	
		Solubility in other solvents:		not available	
	n)		rater (log value):	not available	
	o)	Vapour pressure at 20°C:		not available	
	p)	Density and/or relative density a	t 20°C (ASTM D 1122):		
	q)	Relative vapour density:		not available	
	r)	Particle characteristics:		not available	
9.2	Oth	ner information			
		Oxidizing properties:		notoxidize	
		Crystallization point (1:1) (AST)	MD 1177):	typ37°C	
SEC	тю	N 10 Stability and reactivity	V		
		<i>.</i>			
		activity:	Dangerous reactivity not known.		
	.2 Chemical stability:.3 Possibility of hazardous reactions:		No decomposition if stored and handled properly. Not known.		
		nditions to avoid:	Direct heat or ignition sources.		
		ompatible materials:			
10.5	me	ompatible materials.	Strong acids and oxidizing agents (nitrates, per chlorates).		
10.6	Haz	zardous decomposition products:		osition products are formed under ardous combustion products: See	
			Section 5.	ardous combustion products. See	

Vapours of ethanediol heavier than air and form explosive

Note:

SECTION 11 Toxicological information

11.1 Information on hazard classes as defined	d in Regulation (EC) No 1272/2008
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Acute toxicity: Harmful if swallowed.

Ethanediol (CAS: 107-21-1)			
Oral:	LD_{50} (cat)	1600 mg/kg	
Dermal:	LD ₅₀ (mouse)	> 3500 mg/kg	
Inhalation:	LC_{50} (rat)	> 2.5 mg/L/6 h	

mixture with air.

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



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	<i>Methyl-1H-benzotriazole (CAS:</i> Oral: Dermal:	29385-43 LD ₅₀ (rat) LD ₅₀ (rab)	720 r >2000 r	ng/kg ng/kg/24 h	
	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure:	Based o Based o Based o Based o Based o Based o May car exposur	n available n available n available n available n available n available use damag e.	data, the data, the data, the data, the data, the data, the data, the data, the	classificatio classificatio classificatio classificatio classificatio classificatio eys through	n criteria are not met. n criteria are not met. n criteria are not met. n criteria are not met. prolonged or repeated
11.2	Aspiration hazard: Information on other hazards The mixture does not contain ar concentration of 0.1% or more.			·		n criteria are not met. perties, at a
SEC	TION 12 Ecological informa	tion				
12.1	Toxicity		No data av	ailable fo	or the prepar	ation.
	Components: <i>Ethanediol (CAS: 107-21-1)</i> Fishes (Pimephales promelas Daphnia magna:):	LC_{50} EC ₅₀) mg/L/96 h) mg/L/48 h	
	Methyl-1H-benzotriazole (CAS:	29385-43		> 100	/ IIIg/L/+0 II	
	Algae (Pseudokirchneriella s Crustaceans (Daphnia galeata Crustaceans (Daphnia galeata Crustaceans (Arcartia tonsa) Fish (Danio rerio):	ubcapitata a): a):		8.58 0.4 55	5 mg/L 3 mg/L 4 mg/L 5 mg/L 0 mg/L	72 h 48 h 21 days 48 h 72 h
12.2	Persistence and degradability Biodegradability: <i>Ethanediol (CAS: 107-21-1)</i>		•	0	. (literature c D 301 A) R	lata) eadily biodegradable.
12.3	Bioaccumulative potential <i>Ethanediol (CAS: 107-21-1)</i>		Has low b -1.36	ioaccumu	lation (ethy)	ene glycol)
12.4	Mobility in soil: Mobility in water:		Large spil In water is			nate groundwater.

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



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12.5 Results of PBT and vPvB assessment	Does not contain PBT and vPvB substances, at a concentration of 0.1% or more.				
12.6 Endocrine disrupting properties	The mixture does not contain any substance with endocrine disrupting properties, at a concentration of 0.1% or more.				
12.7 Other adverse effects					
Biological oxygen demand:	<i>Ethanediol:</i> BOD: 0.81 g/g (literature data)				
Chemical oxygen demand:	<i>Ethanediol:</i> COD: 1.29 g/g (literature data)				
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 AwSV)				

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*

A attifacere fluide containing den concus subs

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.

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SECTION 14 Transport information

Land transport:						
	Road/ Railway	ADR/RID:	Not classified.			
14.1. 14.2. 14.3. 14.4. 14.5.	UN number or ID number: UN proper shipping name: Transport hazard class(es): Packing group: Environmental hazards:		Not classified. Not classified. Not classified. Not classified. Not classified.			
14.6.	Special precautions for user:		Not classified.			
V	Vaterways:					
	Inland waterways/ Sea transport	ADN/IMDG:	Not apply to the product.			
A	Air transport:	ICAO/IATA:	Not apply to the product.			

SECTION 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2020/878/EU) and to Regulation (EC) 1272/2008. Seveso category: not classified.
- 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.

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



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

H302	Harmful if swallowed.
H318	Causes serious eye damage.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Acute Tox. 4	Acute toxicity Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 2	Reproductive toxicity Category 2
STOT RE 2	Specific target organ toxicity – repeated exposure Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, Chronic Category 3

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 Labelling
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
Ecx	Effective Concentration x%
Edx	Effective Dose x%
ELINCS	European List of Notified Chemical Substances
ErC50	EC50 in terms of reduction of growth rate;
ES	ExposureScenario

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



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IARC IATA	International Agency for Research on Cancer International Air Transport Association				
IMDG	International Maritime Dangerous Goods				
LCx	Lethal Concentration x%				
LDx	Lethal Dose x%				
LOAEC					
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	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	Predicted No-Effect Concentration			
1.2.101	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					
	VOC Volatile organic compounds				
vPvB	vPvB Very Persistent and very Bio-accumulative				
Revision Indicators:					
Section	Subject of change	Date	Version		
1-16	Revision modification according to 2020/878/EU Full revision due to composition change	24.06.2022	2		