

SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **EK-Ekoolant EVO (concentrate 100mL) series**
Creation date: **1.7.2014**
Revision: : **4.7.2014**
Version: **1**

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product name:

EK-Ekoolant EVO (concentrate 100mL) series

Product code:

3830046999511, 3830046999528, 3830046999535, 3830046999542



chemius.net/xF8dd

1.2. USE OF THE SUBSTANCE/PREPARATION

Use:

Heat Transfer Fluid, with antifreeze and inhibitor functions

Uses advised against:

No information

1.3. COMPANY/UNDERTAKING IDENTIFICATION

Supplier

EKWB d.o.o.
Address: Pot za Brdom 100, 1000 Ljubljana, Slovenia
Tel.: +386 590 966 10

1.4. EMERGENCY TELEPHONE

Emergency:

112

Supplier:

+386 590 966 10

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF SUBSTANCE/PREPARATION

2.1.1. Classification according to directive 67/548/EEC or. 99/45/EC

According to the directive on preparations, the chemical is not classified as dangerous. Safety data sheet available for professional user on request.

2.2. Label elements

2.2.1. Symbol letter(s):

According to the directive on preparations, the symbol is not needed.

2.2.2. Risk phrases:

In accordance with the regulations risk phrases are not required.

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2.2.3. Safety phrases:

According to the legislation, safety phrases are not needed.

2.2.4. Contains:

-

2.2.5. Special provisions

In accordance with Article 9 and 12 of EC 1272/2008, product has been assessed as a mixture where adequate and reliable scientific information demonstrates the occurrence of synergistic and antagonistic effects that render the mixture non-toxic.

2.3. Other hazards

No information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product description

Ethylene Glycol content is rendered non-toxic as a mixture by other constituents.

3.1. Substances

For mixtures see 3.2.

3.2. Mixtures

Chemical name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification according to directive 67/548/EEC or 99/45/EC	REACH reg. number
ethanediol	107-21-1 203-473-3 603-027-00-1	80-90	Acute Tox. 4; H302	Xn; R22	01-2119456816-28
Proprietary ADH Enzyme Inhibitor	- - -	10-20			-
Proprietary Corrosion Inhibitor	- - -	2,5-7			-

4. FIRST AID MEASURES

4.1. First-aid measures

General measures:

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Skin contact:

Take off all contaminated clothing. Wash thoroughly with plenty of water and soap! If feeling unwell seek medical help.

Eye contact:

Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Remove contact lenses. If irritation persists, seek professional medical attention.

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Inhalation:

Remove patient to fresh air-move out of dangerous area. If symptoms persist seek medical attention.

Ingestion:

Do not induce vomiting. Rinse mouth with water and spit out. Rinse mouth with water. Consult a physician. Show the physician the Safety Data Sheet or label.

4.2. Symptoms

Skin contact:

Repeated prolonged exposure – may cause slight irritation.

Eye contact:

-

Inhalation:

Excessive exposure to spray mist, fog, or vapour may cause respiratory irritation.

Ingestion:

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

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5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Alcohol or polymer foam.

Unsuitable extinguishing media

No special precautions required.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of heating harmful vapours/gases can be generated.

5.3. Advice for firefighters

Protective actions

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Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective clothing for fire-fighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137) .

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6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (point 8).

Emergency procedures

Ensure adequate ventilation. Prevent access to unauthorised personnel. Evacuate the danger zone. Do not use open fire and keep away all sources of ignition. Avoid contact with skin and eyes.

6.1.2. For emergency responders

-

6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental entry into water or ground occurs, inform responsible authorities.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

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6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it according to valid regulations on handling with waste.

6.3.3. Other information

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6.4. Reference to other sections

See also sections 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation. Keep away from sources of ignition - No smoking. To protect from open fire and other sources of ignition or heat.

Measures to prevent aerosol and dust generation

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Measures to protect the environment

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7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices-wash hands at breaks and when done working with material. In accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Keep in cool and good ventilated area. Keep away from food, drink and animal feedingstuffs

7.2.2. Packaging materials

-

7.2.3. Requirements for storage rooms and vessels

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7.2.4. Storage class

-

7.2.5. Further information on storage conditions

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7.3. Specific end use(s)

Recommendations

-

Industrial sector specific solutions

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational Exposure limit values

Chemical name (CAS)	Limit values		Short-term exposure limit		Remarks	Biological Tolerance Values
	ml/m ³ (ppm)	mg/m ³	ml/m ³ (ppm)	mg/m ³		
Ethane-1,2-diol particulate vapour (107-21-1)	- 20	10 52	- 40	- 104	Sk	
ethanediol (107-21-1)	10	26				

8.1.2. Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

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8.1.3. DNEL values

for components

Chemical name	Type	exp. route	exp. frequency	value	Remark
ethanediol (107-21-1)	Worker	dermal	long term (systemic effects)	106 mg/kg	
ethanediol (107-21-1)	Consumer	dermal	long term (systemic effects)	53 mg/kg	
ethanediol (107-21-1)	Worker	inhalation	long term (local effects)	7 mg/m ³	

8.1.4. PNEC values

for components

Chemical name	exp. route	value	Remark
ethanediol (107-21-1)	fresh water	10 mg/l	
ethanediol (107-21-1)	marine water	1 mg/l	
ethanediol (107-21-1)	water, intermittent release	10 mg/l	
ethanediol (107-21-1)	water treatment plant	199,5 mg/l	
ethanediol (107-21-1)	fresh water sediment	20,9 mg/kg	
ethanediol (107-21-1)	soil	1,53 mg/kg	

8.2. Exposure controls

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices-wash hands at breaks and when done working with material. Do not eat, drink or smoke while working.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in the area with increased concentration.

8.2.2. Personal protection equipment

Eye and face protection

Wear safety glasses with side shields against possible splashes into the eyes.

Hand protection

Protective gloves (EN 374).

Skin protection

Cotton protective clothing (EN 340) and shoes that cover the entire foot (EN 344).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2.

Thermal hazards

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8.2.3. Environmental exposure controls

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

-	Physical state:	liquid
-	Colour:	according to specification
-	Odour:	Mild

Important health, safety and environmental information

-	pH	No information
-	Melting point	No information
-	Boiling point/boiling range	> 100 °C
-	Flashpoint	ca. 115 °C
-	Vapour rate	No information
-	Ignition temperature	No information
-	Explosion limits (vol%)	3,1 — 15 vol %
-	Vapour pressure	No information
-	Vapour density	No information
-	Density	Density: 1,04 — 1,1 g/cm ³
-	Solubility	Water: Soluble
-	Partition coefficient n-octanol/water (log Kow)	Octanol-water (log Pow) : -1,24
-	Self-flammability	No information
-	Decomposition temperature	No information
-	Viscosity	No information
-	Explosivity	No information
-	Oxidising properties	No information

9.2. Other information

-	Remarks:	
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10. STABILITY AND REACTIVITY

10.1. Reactivity

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10.2. Chemical stability

Product is stable under normal conditions according to handling and storage. Substance is hygroscopic and will absorb water by contact with air moisture.

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10.3. Possibility of hazardous reactions

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10.4. Conditions to avoid

No special precautions required. Consider the directions for use and storage. Protect from heat, direct sunlight, open fire, free sparks.

10.5. Incompatible materials

Oxidants.
Strong acids.
Strong bases.

10.6. Hazardous decomposition products

Under normal use conditions no hazardous decomposition products expected. In case of fire/explosion vapours dangerous for health are spread. Carbon dioxide; carbon monoxide.
Nitrogen oxides;

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1. Acute toxicity

for product

exp. route	Type	species	Time	value	Method	Remark
oral	LD ₅₀	rat		> 15000 mg/kg		

Additional information

In accordance with Article 9 and 12 of EC 1272/2008, product has been assessed as a mixture where adequate and reliable scientific information demonstrates the occurrence of synergistic and antagonistic effects that render the mixture non-toxic.

11.1.2. Skin corrosion/irritation, serious eye damage/irritation, aspiration hazard

No information

11.1.3. Respiratory or skin sensitisation

No information

11.1.4. Carcinogenicity, Mutagenicity, Reproductive toxicity

Carcinogenicity

- for product

exp. route	Type	species	Time	value	result	Method	Remark
					The chemical is not classified as carcinogenic.		

(Germ cell) mutagenicity

No information

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Reproductive toxicity

No information

Summary of evaluation of the CMR properties

No information

11.1.5. STOT-single and repeated exposure

No information

12. ECOLOGICAL INFORMATION

Product is not classified as dangerous for environment..

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

for product

Type	Value	Exposure time	Species	Organism	Method	Remark
LC ₅₀	> 10000 mg/L	96 h	fish			
EC ₅₀	> 10000 mg/L	48 h	crustacea	<i>Daphnia magna</i>		
IC ₅₀	> 10000 mg/L	72 h	algae			

12.1.2. Chronic (long-term) toxicity

No information

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information

12.2.2. Biodegradation

No information

Additional information

Preparation with easily biodegradable substances.

12.3. Bioaccumulative potential

12.3.1. Partition coefficient n-octanol/water (log Kow)

for product

Media	value	Temperature	pH	Concentration	Method
Octanol-water (log Pow)	-1,24				

12.3.2. Bioconcentration factor (BCF)

No information

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Additional information

No bioaccumulation expected.

12.4. Mobility

12.4.1. Known or predicted distribution to environmental compartments

No information

12.4.2. Surface tension

No information

12.4.3. Adsorption/Desorption

No information

Additional information

Contains component (s) with potential for mobility in the soil.

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: to leave it to authorized collector/remover/transformer of hazardous waste.

Packaging

Completely emptied container dispose according to regulations.

13.1.2. Waste treatment-relevant information

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13.1.3. Sewage disposal-relevant information

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13.1.4. Other disposal recommendations

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14. TRANSPORT INFORMATION

14.1. UN number

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14.2. UN proper shipping name

Not dangerous according to ADR.

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

NO

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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15. REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- Dangerous preparations directive (99/45/EC) as amended
- Dangerous substances directive (67/548/EEC) as amended

15.1.1. Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

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15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. OTHER INFORMATION

Indication of changes

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Key literature references and sources for data

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List of relevant R phrases

(R22) Harmful if swallowed.

List of relevant H phrases

(H302) Harmful if swallowed.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.