

Safety Data Sheet

according to UK REACH Regulation

Alphacool Eisbaer CPU (all versions)

Revision date: 15.04.2024

Product code: 11284

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

1.1. Product identifier

Alphacool Eisbaer CPU (all versions)

Product group: Mixtures

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

Use of the substance/mixture

Refrigerants

1.3. Details of the supplier of the safety data sheet

Company name:	Alphacool International GmbH	
	Tochtergesellschaft	
Street:	Marienberger Str. 1	
Place:	D-38122 Braunschweig	
Telephone:	0531 28874-0	Telefax: 0531 28874-22
E-mail:	info@alphacool.com	
Contact person:	Ronald Willms	Telephone: 05207 95846-205
E-mail:	einkauf@aquatuning.de	
Internet:	www.alphacool.com	

1.4. Emergency telephone number: +49 (0) 6131 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

ethanediol; ethylene glycol

Signal word: Warning

Pictograms:



Hazard statements

H302 Harmful if swallowed.

Precautionary statements

P270 Do not eat, drink or smoke when using this product.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P330 Rinse mouth.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Pictograms:



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2.3. Other hazards

Es liegen keine zusätzlichen Angaben vor.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
107-21-1	ethanediol; ethylene glycol			30 - < 35 %
	203-473-3	603-027-00-1		
	Acute Tox. 4; H302			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
107-21-1	203-473-3	ethanediol; ethylene glycol	30 - < 35 %
	dermal: LD50 = 10600 mg/kg; oral: ATE = 500 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Self-protection of the first aider
Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air. In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist. After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink 1 glass of water. Medical treatment necessary. Rinse mouth thoroughly with water.
Call a physician immediately.

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

When in doubt or if symptoms are observed, get medical advice.

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

Treat symptomatically. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air. Nitrogen oxides (NO_x)
Carbon monoxide

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Gefährdete Behälter mit Wassersprühstrahl kühlen.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up**For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Do not rinse down with water.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13 Disposal: see section 13
Safe handling: see section 7

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Advice on protection against fire and explosion

Ensure adequate ventilation of the storage area.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Further information on handling

Handle and open container with care.

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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Further information on storage conditions

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

no classification

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Eye/face protection

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Hand protection is not required.

Skin protection

Use of protective clothing. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Environmental exposure controls

See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid:
 Colour: farblos
 Odour: schwach wahrnehmbar

Melting point/freezing point:	Daten nicht verfügbar
Boiling point or initial boiling point and boiling range:	104 °C
Flammability:	Daten nicht verfügbar
Lower explosion limits:	3,2 vol. %
Upper explosion limits:	43 vol. %
Flash point:	Daten nicht verfügbar

Test method

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Auto-ignition temperature:	410 °C
Decomposition temperature:	Daten nicht verfügbar
pH-Value (at 20 °C):	8
Viscosity / kinematic:	Daten nicht verfügbar
Water solubility:	Daten nicht verfügbar
Solubility in other solvents	
Daten nicht verfügbar	
Dissolution rate:	Daten nicht verfügbar
Partition coefficient n-octanol/water:	Daten nicht verfügbar
Dispersion stability:	Daten nicht verfügbar
Vapour pressure:	0,053 hPa
(at 20 °C)	
Vapour pressure:	1,1 hPa
(at 50 °C)	
Density:	Daten nicht verfügbar
Relative density:	Daten nicht verfügbar
Bulk density:	Daten nicht verfügbar
Relative vapour density:	Daten nicht verfügbar
Particle characteristics:	Daten nicht verfügbar

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive. Daten nicht verfügbar

Sustaining combustion:

No data available UN Test L.2

Self-ignition temperature

Solid:

Daten nicht verfügbar

Gas:

Daten nicht verfügbar

Oxidizing properties

Daten nicht verfügbar

Other safety characteristics

Evaporation rate:

not determined

Solvent separation test:

Daten nicht verfügbar

Solvent content:

25,00 %, water: 75,00 %

Solid content:

flüssig

Sublimation point:

Daten nicht verfügbar

Softening point:

Daten nicht verfügbar

Pour point:

Daten nicht verfügbar

Viscosity / dynamic:

Daten nicht verfügbar

Flow time:

Daten nicht verfügbar0

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

The product develops hydrogen in an aqueous solution in contact with metals.

10.4. Conditions to avoid

Es sind keine speziell zu vermeidenden Bedingungen bekannt.

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10.5. Incompatible materials

Es liegen keine zusätzlichen Informationen vor.

10.6. Hazardous decomposition products

- Carbon monoxide
- Formaldehyde
- Hydrogen
- Methane

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

ATEmix calculated

ATE (oral) 1515 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	ATE mg/kg	500		
	dermal	LD50 mg/kg	10600	Rabbit	GESTIS

11.2. Information on other hazards

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Das Produkt wurde nicht geprüft. Die Aussage ist von den Eigenschaften der Einzelkomponenten abgeleitet.

Die Einstufung wurde nach dem Berechnungsverfahren der CLP-Verordnung (EG) Nr. 1272/2008 vorgenommen.

SECTION 12: Ecological information

12.1. Toxicity

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol; ethylene glycol	-1,36

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

There are no data available on the mixture itself.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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12.7. Other adverse effects

There are no data available on the mixture itself.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Nicht in die Kanalisation oder Gewässer gelangen lassen.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Wasser.

SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.
- 14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.
- 14.4. Packing group:** No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

- 14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.
- 14.4. Packing group:** No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

- 14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.
- 14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.
- 14.4. Packing group:** No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.
- 14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.
- 14.4. Packing group:** No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Directive 2004/42/EC on VOC in paints and varnishes: 33 %

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

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National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
 Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Acute Tox: Acute toxicity
 CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.

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Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)