

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Alpine Frostschutz Scheibenklar Konzentrat

Print date: 20.10.2016

Product code: MIT0010

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**1.3. Details of the supplier of the safety data sheet**

| | | |
|--------------------------|------------------------------------|------------------------------|
| Company name: | Mitan Mineralöl GmbH | |
| Street: | Industriestraße 8 | |
| Place: | D-49577 Ankum | |
| Telephone: | +49 (0)5462/7470-50 | Telefax: +49 (0)5462/7470-33 |
| e-mail: | info@mitan-oil.de | |
| e-mail (Contact person): | sicherheitsdatenblatt@mitan-oil.de | |
| Internet: | www.mitan-oil.de | |

1.4. Emergency telephone

Gif tinformationszentrum Nord (Göttingen)

number: +49 (0)551/19240**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 3

Hazard Statements:

Flammable liquid and vapour.

2.2. Label elements**Regulation (EC) No. 1272/2008****Signal word:** Warning**Pictograms:****Hazard statements**

H226 Flammable liquid and vapour.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to Dispose of waste according to applicable legislation..

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|---|--------------|----------|-------------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 64-17-5 | ethanol, ethyl alcohol | | | 60 - < 65 % |
| | 200-578-6 | 603-002-00-5 | | |
| | Flam. Liq. 2; H225 | | | |
| 107-21-1 | ethanediol, ethylene glycol | | | 10 - < 15 % |
| | 203-473-3 | 603-027-00-1 | | |
| | Acute Tox. 4; H302 | | | |
| 68585-34-2 | Alkylethersulfat, Natriumsalz 28% | | | < 0.1 % |
| | | | | |
| | Skin Irrit. 2, Eye Irrit. 2; H315 H319 | | | |

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

Labelling for contents according to Regulation (EC) No 648/2004

< 5 % anionic surfactants, perfumes.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Self-protection of the first aider Remove casualty to fresh air and keep warm and at rest. Change contaminated, saturated clothing.

After inhalation

Provide fresh air. If unconscious place in recovery position and seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Foam, Extinguishing powder. In case of major fire and large quantities: Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Carbon dioxide (CO₂). Sulphur dioxide (SO₂) Nitrogen oxides (NO_x)

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5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Protective equipment Remove persons to safety. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed. Store in a cool dry place. Keep away from heat. Protect from sunlight. Provide adequate ventilation as well as local exhaust at critical locations.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Store in a cool dry place.

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 |
| 64-17-5 | Ethanol | 1000 | 1920 | | TWA (8 h) | WEL |
| | | - | - | | STEL (15 min) | WEL |

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8.2. Exposure controls



Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Change contaminated, saturated clothing. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke.

Eye/face protection

Wear 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. DIN EN 374 Suitable gloves type: NBR (Nitrile rubber)

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
 Colour: blue
 Odour: fruity

pH-Value (at 20 °C):

Test method
 8

Changes in the physical state

Melting point: -63,5 °C

Initial boiling point and boiling range: 78 °C

Flash point: 23 °C

Flammability

Solid: not applicable

Gas: not applicable

Explosive properties

The product is not: Explosive In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Lower explosion limits: 3,2 vol. %

Upper explosion limits: 15,3 vol. %

Ignition temperature: 410 °C

Auto-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

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Oxidizing properties

No self-ignition up to the melting point.

Vapour pressure: 59 hPa
(at 20 °C)

Density (at 20 °C): 0,915 g/cm³

Water solubility: easily soluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

| CAS No | Chemical name | | | |
|----------|-----------------------------|------------------|---------|--------|
| | Exposure route | Dose | Species | Source |
| 64-17-5 | ethanol, ethyl alcohol | | | |
| | oral | LD50 6200 mg/kg | Rat | IUCLID |
| | inhalative (4 h) vapour | LC50 95,6 mg/l | Rat | RTECS |
| 107-21-1 | ethanediol, ethylene glycol | | | |
| | oral | ATE 500 mg/kg | | |
| | dermal | LD50 10600 mg/kg | Rabbit | GESTIS |

Irritation and corrosivity

Based on available data, the classification criteria are not met.

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Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

| CAS No | Chemical name | | | | |
|---------|--------------------------|--------------|--------------|---------|-------------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source |
| 64-17-5 | ethanol, ethyl alcohol | | | | |
| | Acute crustacea toxicity | EC50 mg/l | 9268 - 14221 | 48 h | Daphnia magna IUCLID |

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|-----------------------------|---------|
| 64-17-5 | ethanol, ethyl alcohol | -0,31 |
| 107-21-1 | ethanediol, ethylene glycol | -1,36 |

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of contaminated packaging

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors
Classified as hazardous waste.

Contaminated packaging

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

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SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1987
14.2. UN proper shipping name: ALCOHOLS, N.O.S. (ETHANOL (ETHYLALCOHOL))
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Special Provisions: 274 601
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1987
14.2. UN proper shipping name: ALCOHOLS, N.O.S. (ETHANOL (ETHYLALCOHOL))
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Special Provisions: 274 601
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1987
14.2. UN proper shipping name: ALCOHOLS, N.O.S. (ETHANOL (ETHYLALCOHOL))
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Special Provisions: 223, 274
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-E, S-D

Air transport (ICAO)

14.1. UN number: UN 1987
14.2. UN proper shipping name: ALCOHOLS, N.O.S. (ETHANOL (ETHYLALCOHOL))

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14.3. Transport hazard class(es): 3**14.4. Packing group:** III

Hazard label: 3



Special Provisions: A3 A180

Limited quantity Passenger: 10 L

Passenger LQ: Y344

Excepted quantity: E1

IATA-packing instructions - Passenger: 355

IATA-max. quantity - Passenger: 60 L

IATA-packing instructions - Cargo: 366

IATA-max. quantity - Cargo: 220 L

14.6. Special precautions for user

Warning: Combustible liquid.

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

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC): 61,99 % (567,209 g/l)

2004/42/EC (VOC): 72,98 % (667,767 g/l)

Additional information

To follow: 850/2004/EC, 1107/2009/EC, 649/2012/EC.

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information**Abbreviations and acronyms**ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

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| | |
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| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |

Further Information

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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)