



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.02.2021

Version number 1.4

Revision: 25.02.2021

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

- **Product identifier**
- **Trade name: Oilfino Antifreeze SI-OAT**
- **UFI: VN40-H031-H00E-JJEA**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
Refrigerant  
Antifreeze
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
oilfino Mineralöl GmbH  
Werkstr. 12  
D- 25497 Prisdorf  
info@oilfino.com  
Tel.: +49 (0) 4101 / 79900  
www.oilfino.com
- **Further information obtainable from: Sales**
- **Emergency telephone number:**  
Gift-Informationszentrum Nord (Göttingen)  
Telefon +49 (0)551-19240

### SECTION 2: Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.

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**· Hazard pictograms**

GHS07 GHS08

**· Signal word** Warning**· Hazard-determining components of labelling:**ethanediol  
2-Ethylcaproic**· Hazard statements**H302 Harmful if swallowed.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to the kidneys through prolonged or repeated exposure.**· Precautionary statements**P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read carefully and follow all instructions.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P330 Rinse mouth.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.**· Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.  
**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· Chemical characterisation: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.

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**· Dangerous components:**

CAS: 107-21-1 EINECS: 203-473-3	ethanediol	STOT RE 2, H373; Acute Tox. 4, H302	≥50-≤100%
CAS: 19766-89-3 EINECS: 243-283-8	2-Ethylcaproic	Repr. 2, H361	≥3-≤10%

**· Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****· Description of first aid measures****· General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**· After skin contact:** Generally the product does not irritate the skin.**· After eye contact:** Rinse opened eye for several minutes under running water.**· After swallowing:** Call for a doctor immediately.**· Information for doctor:****· Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**· Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures****· Extinguishing media****· Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

Foam

Sand

Water haze

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.

**· Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

**· Advice for firefighters****· Protective equipment:** Mouth respiratory protective device.

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### SECTION 6: Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class (TRGS):** 10
- **Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**107-21-1 ethanediol**

WEL	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm Sk *particulate **vapour
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· **DNELs**

**107-21-1 ethanediol**

Dermal	DNEL Long-term – dermal, systemic effects	106 mg/kg_bw/day (Worker) 53 mg/kg_bw/day (general public)
Inhalative	DNEL long-term - inhalation local effects	35 mg/m <sup>3</sup> (Worker) 7 mg/m <sup>3</sup> (general public)

· **PNECs**

**107-21-1 ethanediol**

PNEC short term, fresh water	10 mg/l (Aquatic organisms)
PNEC short term, sea water	1 mg/l (Aquatic organisms)
PNEC short term, sewage plant	199.5 mg/l (Aquatic organisms)
PNEC short term fresh water sediment	37 mg/kg (Aquatic organisms)
PNEC short term soil	1.53 mg/kg (terrestrial organisms)
PNEC short term sea water sediment	3.7 mg/kg (Aquatic organisms)
PNEC short term, intermittent releases	10 mg/l (Aquatic organisms)

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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**Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:****Form:**

Fluid

**Colour:**

According to product specification

**Odour:**

Characteristic

**Odour threshold:**

Not determined.

**pH-value at 20 °C:**

7.5-9

**Change in condition****Melting point/freezing point:**

Undetermined.

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<b>Initial boiling point and boiling range:</b>	197.4 °C
· <b>Flash point:</b>	111 °C
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	398 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3 Vol %
<b>Upper:</b>	28 Vol %
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	1.11-1.14 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water at 20 °C:</b>	1.000 g/l
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>VOC (EC)</b>	0.00 %
<b>Solids content:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

**SECTION 10: Stability and reactivity**

- **Reactivity** No further relevant information available.

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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.

**LD/LC50 values relevant for classification:**

Oral	LD50	mg/kg (rat)
	Acute Toxicity Estimate of ingredient (ATE) oral	500 mg/kg

**107-21-1 ethanediol**

Dermal	LD50	>3,500 mg/kg (rat)
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**19766-89-3 2-Ethylcaproic**

Oral	LD50	2,043 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**  
Suspected of damaging fertility or the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**  
May cause damage to the kidneys through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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### SECTION 12: Ecological information

**· Toxicity****· Aquatic toxicity:****107-21-1 ethanediol**

LC50 (96h) mg/ltr.	72,830 mg/ltr (Fish, minnows)
EC50 (48h)	100 mg/l (daphnia)
EC50 (96h) mg/ltr	6,500-13,000 mg/ltr (Pseudokirchneriella subcapitata)

**19766-89-3 2-Ethylcaproic**

LC50 (96h) mg/ltr.	>100 mg/ltr (Fish)
EC50 (48h)	910 mg/l (Daphnia magna)
EC50 (72h)	49.3 mg/l (algae)
NOEC	18 mg/ml /21d (Daphnia magna)

**· Persistence and degradability**

19766-89-3	2-Ethylcaproic	98 (28d) %
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**· Behaviour in environmental systems:****· Bioaccumulative potential** No further relevant information available.**· Mobility in soil** No further relevant information available.**· Additional ecological information:****· General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**· Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

**· Waste treatment methods****· Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· <b>European waste catalogue</b>	
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
15 01 10*	packaging containing residues of or contaminated by hazardous substances
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP10	Toxic for reproduction

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

· <b>UN-Number</b>	
· <b>ADR, IMDG, IATA</b>	not regulated
· <b>UN proper shipping name</b>	
· <b>ADR, IMDG, IATA</b>	not regulated
· <b>Transport hazard class(es)</b>	
· <b>ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	not regulated
· <b>Packing group</b>	
· <b>ADR, IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	not regulated

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### SECTION 15: Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

- **Disclaimer**

This safety data sheet contains only safety relevant information. The information is based on the state of our knowledge at the time of revision, however, it does not constitute a guarantee of product properties, product information or product specifications and does not establish a contractual legal relationship. This document is only valid in its unchanged form. In the event of changes by third parties, the exhibitor accepts no responsibility for form and content or for any damages or claims arising from such changes. The information is not transferable to other products. If the product named in this safety data sheet is mixed, blended or processed with other materials or is subjected to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise. The data sheet does not release the user from the obligation to ensure that he acts in accordance with all regulations in connection with his activity.
- **Relevant phrases**

H302 Harmful if swallowed.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.
- **Department issuing SDS:** Environmental Protection Department
- **Contact:** MSDS authorized Person
- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)

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LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
Repr. 2: Reproductive toxicity – Category 2  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
· \* **Data compared to the previous version altered.**

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