

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.12.2023

Version number 1

Revision: 07.12.2023

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

- **1.1 Product identifier**
- **Trade name:** MANNOL 4111 Antifreeze AG11 Longterm
- **UFI:** TXCC-602S-800X-V71E
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Technical function** Antifreeze agent
- **Application of the substance / the mixture** Heat transfer fluid
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
UAB "SCT Lubricants"  
Silutes Pl. 119  
LIT-95112 KLAIPEDA  
LITHUANIA  
renata@sct.lt
- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:**  
Members of the public seeking specific information on poisons should contact:  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

## SECTION 2: Hazards identification

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



GHS08 health hazard

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



GHS07

Acute Tox. 4 H302 Harmful if swallowed.  
Eye Irrit. 2 H319 Causes serious eye irritation.

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



GHS07 GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
ethanediol  
2,2'-oxybisethanol  
3,5,5-trimethylhexanoate
- **Hazard statements**  
H302 Harmful if swallowed.

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H319 Causes serious eye irritation.

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

· **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.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear eye protection / face protection.
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- P330 Rinse mouth.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P314 Get medical advice/attention if you feel unwell.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 107-21-1	ethanediol	80–95%
EINECS: 203-473-3	STOT RE 2, H373; Acute Tox. 4, H302	
CAS: 111-46-6	2,2'-oxybisethanol	0–15%
EINECS: 203-872-2	Acute Tox. 4, H302	
CAS: 93918-10-6	3,5,5-trimethylhexanoate	<2.0%
EINECS: 299-890-3	Skin Corr. 1, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

· **4.1 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 inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>. Do not use water.  
Use fire extinguishing methods suitable to surrounding conditions.  
Foam  
Fire-extinguishing powder  
Sand
- **For safety reasons unsuitable extinguishing agents:** Water
- **5.2 Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Ensure adequate ventilation  
Particular danger of slipping on leaked/spilled product.  
Wear protective clothing.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 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 section 13.  
Ensure adequate ventilation.
- **6.4 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

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 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.
- **7.3 Specific end use(s)** No further relevant information available.

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### SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

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

**107-21-1 ethanediol (95.0%)**

OEL	Short-term value: 40 mg/m <sup>3</sup> , 104 ppm Long-term value: 52 mg/m <sup>3</sup> , 20 ppm Sk, IOELV
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**111-46-6 2,2'-oxybisethanol (15.0%)**

OEL	Long-term value: 100 mg/m <sup>3</sup> , 23 ppm
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· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

· **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.

· **Hand protection**



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/face protection**



Tightly sealed goggles

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### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

· Physical state	Fluid
· Colour:	Blue
· Odour:	Product specific
· Odour threshold:	Not determined.
· Melting point/freezing point:	<-18 °C
· Boiling point or initial boiling point and boiling range	>160 °C
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	1.122–1.125 g/cm <sup>3</sup>
· Relative density	Not determined.
· Vapour density	Not determined.

#### · 9.2 Other information

· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not determined.

#### · Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void

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· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide  
Aldehyde  
Poisonous gases/vapours  
Carbon dioxide

### SECTION 11: Toxicological information

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

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

**107-21-1 ethanediol**

Oral	LD50	5,840 mg/kg (rat)
Dermal	LD50	9,530 mg/kg (rabbit)

**111-46-6 2,2'-oxybisethanol**

Oral	LD50	12,565 mg/kg (rat)
Dermal	LD50	11,890 mg/kg (rabbit)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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** 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**  
May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

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### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**  
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **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.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- |                                   |   |
|-----------------------------------|---|
| · <b>European waste catalogue</b> |   |
| HP5                               | Specific Target Organ Toxicity (STOT)/Aspiration Toxicity |
| HP6                               | Acute Toxicity  |
- **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>14.1 UN number or ID number</b>                                  |                 |
| · <b>ADR, ADN, IMDG, IATA</b>   | not regulated   |
| · <b>14.2 UN proper shipping name</b>                                 |                 |
| · <b>ADR, ADN, IMDG, IATA</b>   | not regulated   |
| · <b>14.3 Transport hazard class(es)</b>                              |                 |
| · <b>ADR, ADN, IMDG, IATA</b>   |                 |
| · <b>Class</b>  | not regulated   |
| · <b>14.4 Packing group</b>   |                 |
| · <b>ADR, IMDG, IATA</b>  | not regulated   |
| · <b>14.5 Environmental hazards:</b>                                  | Not applicable. |
| · <b>14.6 Special precautions for user</b>                            | Not applicable. |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b> | Not applicable. |

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<b>UN "Model Regulation":</b>	not regulated
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### SECTION 15: Regulatory information

- **15.1 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

<ul style="list-style-type: none"> <li>· <b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b></li> </ul>
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None of the ingredients is listed.
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- **REGULATION (EU) 2019/1148**

<ul style="list-style-type: none"> <li>· <b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))</b></li> </ul>
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None of the ingredients is listed.
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- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.
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- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.
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- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.
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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Department issuing SDS:** Product safety department.

- **Contact:** Mrs. Zubaite

- **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)

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

Skin Corr. 1: Skin corrosion/irritation – Category 1

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2