

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

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Printing date 04.09.2018

Version number 2

Revision: 04.09.2018

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

#### · 1.1 Product identifier

· Trade name: Antifreeze Conc. GW11

· 1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.

· Application of the substance / the mixture Antifreeze

#### · 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Hengst SE  
Nienkamp 55-85  
48147 Münster  
Germany

T +49 (0)251 20 20 2-0

F +49 (0)251 20 20 2-646

· Further information obtainable from: [oil@hengst.com](mailto:oil@hengst.com)

· 1.4 Emergency telephone number:

Informationszentrale gegen Vergiftungen Uni - Klinikum Bonn; Notfall - Nr.: +49 228 19 240

### 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 organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

#### · 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

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**· Hazard-determining components of labelling:**

ethanediol

**· Hazard statements**

H302 Harmful if swallowed.

H373 May cause damage to organs 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 label before use.

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.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

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 Chemical characterisation: Mixtures****· Description:** Mixture: consisting of the following components.**· Dangerous components:**

CAS: 107-21-1 ethanediol 50-100%

EINECS: 203-473-3  STOT RE 2, H373;  Acute Tox. 4, H302

Index number: 603-027-00-1

CAS: 12179-04-3 disodium tetraborate pentahydrate ≤ 2.5%

EINECS: 215-540-4  Repr. 1B, H360FD

Index number: 005-011-02-9

**· SVHC**

12179-04-3 disodium tetraborate pentahydrate

**· 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.

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- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **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>, powder or water spray. Fight larger fires with water spray.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** In case of fire, the following can be released:
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Keep people at a distance and stay on the windward side.
- **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 item 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:** No special measures required.

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- **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:** Storage in a collecting room is required.
- **7.3 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.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
**107-21-1 ethanediol**  
IOELV Short-term value: 104 mg/m<sup>3</sup>, 40 ppm  
Long-term value: 52 mg/m<sup>3</sup>, 20 ppm  
Skin
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 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.
- **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.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
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.
- **Not suitable are gloves made of the following materials:** Leather gloves
- **Eye protection:** Goggles recommended during refilling

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**SECTION 9: Physical and chemical properties****· 9.1 Information on basic physical and chemical properties****· General Information**

- |  |   |
|--|---|
| · <b>Appearance:</b>                             | clear   |
| · <b>Form:</b>                                   | Fluid   |
| · <b>Colour:</b>                                 | According to product specification  |
| · <b>Odour:</b>                                  | Characteristic  |
| · <b>Odour threshold:</b>                        | Not determined.   |
| · <b>pH-value:</b>                               | Not determined.   |
| · <b>Change in condition</b>                     |   |
| <b>Melting point/freezing point:</b>             | Undetermined.   |
| <b>Initial boiling point and boiling range:</b>  | 180 °C (DIN 51751)  |
| · <b>Pour point</b>                              | Not applicable  |
| · <b>Flash point:</b>                            | 122 °C (DIN ISO 2592)   |
| · <b>Flammability (solid, gas):</b>              | Not applicable.   |
| · <b>Ignition temperature:</b>                   | 410 °C (DIN 14522)  |
| · <b>Decomposition temperature:</b>              | Not determined.   |
| · <b>Auto-ignition temperature:</b>              | Not determined.   |
| · <b>Explosive properties:</b>                   | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · <b>Explosion limits:</b>                       |   |
| <b>Lower:</b>                                    | 3.2 Vol % (DIN EN 1839)   |
| <b>Upper:</b>                                    | 53.0 Vol % (DIN EN 1839)  |
| · <b>Vapour pressure at 20 °C:</b>               | 0.1 hPa   |
| · <b>Density at 20 °C:</b>                       | 1.11 g/cm <sup>3</sup> (DIN 51757)  |
| · <b>Relative density</b>                        | Not determined.   |
| · <b>Vapour density</b>                          | Not determined.   |
| · <b>Evaporation rate</b>                        | Not determined.   |
| · <b>Solubility in / Miscibility with water:</b> | Fully miscible.   |
| · <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>Organic solvents:</b>                         | 0.0 %   |

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- **9.2 Other information** No further relevant information available.

**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**  
Reacts with strong acids and oxidising agents.  
Reacts with strong oxidising agents.
- **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 and carbon dioxide

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.
- **LD/LC50 values relevant for classification:**  
**107-21-1 ethanediol**  
Oral LD50 5840 mg/kg (rat)  
Dermal LD50 9530 mg/kg (rabbit)
- **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.
- **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** 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 organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.

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- **Degree of elimination:**
  - 107-21-1 ethanediol**
  - EC50 6500 mg/kg (Alg)
  - 13000 mg/kg (SwF)
  - 9300 mg/kg (daphnia)
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**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.  
Delivery of waste oil to officially authorised collectors only.
- **European waste catalogue**

16 01 14\* antifreeze fluids containing hazardous substances
- **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**

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void
- **14.5 Environmental hazards:**
- **Marine pollutant:** No

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- 14.6 Special precautions for user *Not applicable.*
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code *Not applicable.*
- UN "Model Regulation": *Void*

**SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- 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*
- Hazard statements  
*H302 Harmful if swallowed.*  
*H373 May cause damage to organs 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 label before use.*  
*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.*  
*P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*  
*P330 Rinse mouth.*  
*P314 Get medical advice/attention if you feel unwell.*  
*P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*
- 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*
- National regulations:
- Additional classification according to Decree on Hazardous Materials, Annex II: *Void*
- Other regulations, limitations and prohibitive regulations *None*

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- **Substances of very high concern (SVHC) according to REACH, Article 57**  
None  
12179-04-3 disodium tetraborate pentahydrate
- **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.  
H360FD May damage fertility. May damage the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.
- **Department issuing SDS:** Product safety
- **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 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  
SVHC: Substances of Very High Concern  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
Repr. 1B: Reproductive toxicity – Category 1B  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- **Sources** Concawe Product Dossier No.97/108. Concawe Product Dossier Nn. 01/54.

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