

Antifrogen SOL HT

Print date 04.07.2024
 Revision date 04.07.2024
 Version 6.0 (en)
 replaces version of 06.02.2019 (4.0)

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

Trade name/designation Antifrogen SOL HT
Art-Nr(n). 1631

1.2 Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Cooling liquid brine.
 Convector fluid.
 Functional fluid.

1.3 Details of the supplier of the safety data sheet**Supplier**

GHC Gerling, Holz & Co. Handels GmbH
 Ruhrstraße 113
 D-22761 Hamburg
 Telephone +49 40 853 123 0
 E-mail hamburg@ghc.de
 Website www.ghc.com

Department responsible for information:
 GHC Gerling, Holz & Co. Handels GmbH
 Telephone +49 40 853 123 0

E-mail (competent person):
 msds@ghc.de

*** 1.4 Emergency telephone number**

EN: Poison Information Center Mainz +49 6131 19240

*** SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Remark**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2 Label elements

No data available

*** 2.3 Other hazards***** Other adverse effects**

The substance/mixture does not contain components identified as having endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

Results of PBT and vPvB assessment

The substance/mixture does not contain components meeting the PBT/vPvB criteria of the Reach Regulation, Annex XIII, at levels of 0.1% or higher.

*** SECTION 3: Composition / information on ingredients****3.1 Substances**

not applicable

*** 3.2 Mixtures****Hazardous ingredients**

CAS No	EC No	Index No	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
112-27-6	203-953-2		Triethylene glycol	weight-%		

Antifrogen SOL HT

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Revision date 04.07.2024
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REACH No.	Substance name
01-2119438366-35	Triethylene glycol

- * **Remark**
Mixture of higher boiling glycols with corrosion inhibitors.
- * **SECTION 4: First aid measures**
- * **4.1 Description of first aid measures**
- * **General information**
Remove contaminated, saturated clothing immediately.
In the event of persistent symptoms obtain medical treatment.
First aider: Pay attention to self-protection!
- * **Following inhalation**
Remove casualty to fresh air and keep warm and at rest.
In the event of symptoms refer for medical treatment.
- * **Following skin contact**
After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, consult a physician.
- * **After eye contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical assistance.
- Following ingestion**
Do NOT induce vomiting.
Rinse mouth immediately and drink plenty of water.
Call a physician immediately.
- * **4.2 Most important symptoms and effects, both acute and delayed**
- * **Symptoms**
No known symptoms to date.
- * **4.3 Indication of any immediate medical attention and special treatment needed**
- * **Notes for the doctor**
Treat symptomatically.
- * **SECTION 5: Firefighting measures**
- * **5.1 Extinguishing media**
- * **Suitable extinguishing media**
The product itself does not burn. The product itself does not burn. Match extinguishing measures to surrounding fire.
Water spray jet
alcohol resistant foam
Extinguishing powder
Carbon dioxide (CO₂)
- Unsuitable extinguishing media**
Full water jet
- * **5.2 Special hazards arising from the substance or mixture**
- * **Hazardous combustion products**
Carbon monoxide
Carbon dioxide (CO₂)
- * **5.3 Advice for firefighters**
- * **Special protective equipment for firefighters**
Wear a self-contained breathing apparatus and chemical protective clothing.

Antifrogen SOL HT

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* Additional information

Use water spray jet to protect personnel and to cool endangered containers.
Exposure to fire may cause rupture / explosion of the containers.
Dispose of fire residues and contaminated extinguishing water in accordance with local, official regulations.

* SECTION 6: Accidental release measures

* 6.1 Personal precautions, protective equipment and emergency procedures

* **For non-emergency personnel**
Use personal protection equipment.
Leave the danger area.

For emergency responders
Personal protection by wearing close-fitting protective clothing and breathing apparatus.
Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil.
Do not allow to enter into surface water or drains.

* 6.3 Methods and material for containment and cleaning up

* **For containment**
Prevent the liquid from spreading over a wide area (set up barriers, cover sewage systems).

* **For cleaning up**
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

Disposal: see section 13
Personal protection equipment: see section 8

* SECTION 7: Handling and storage

* 7.1 Precautions for safe handling

* **Protective measures**
Use only in well-ventilated areas.
Usual measures for fire prevention.
If used properly, no special measures are required.

Advices on general occupational hygiene
When using do not eat, drink, smoke, sniff.
Wash hands before breaks and after work.
Remove contaminated clothing and protective equipment before entering eating areas.

* 7.2 Conditions for safe storage, including any incompatibilities

* **Requirements for storage rooms and vessels**
All regulations and local requirements for the storage of containers have to be respected.
Keep container tightly closed and in a well-ventilated place.
Only use containers specifically approved for the substance/product.

* **Materials to avoid**
Do not store together with explosives.
Do not store together with infectious substances.
Do not store together with radioactive material.
Do not store together with food or feed.

* 7.3 Specific end use(s)

* **Recommendation**
See section 1.2
An exposure scenario is not required.

Antifrogen SOL HT

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* **SECTION 8: Exposure controls/personal protection*** **8.1 Control parameters*** **DNEL worker**

CAS No	Substance name	DNEL value	DNEL type	Remark
112-27-6	Triethylene glycol	50 mg/m ³	acute inhalative (local)	
112-27-6	Triethylene glycol	40 mg/kg bw/day	long-term dermal (systemic)	

DNEL Consumer

CAS No	Substance name	DNEL value	DNEL type	Remark
112-27-6	Triethylene glycol	25 mg/m ³	acute inhalative (local)	
112-27-6	Triethylene glycol	20 mg/kg bw/day	long-term dermal (systemic)	

* **PNEC**

CAS No	Substance name	PNEC Value	PNEC type	Remark
112-27-6	Triethylene glycol	10 mg/L	aquatic, freshwater	
112-27-6	Triethylene glycol	1 mg/L	aquatic, marine water	
112-27-6	Triethylene glycol	46 mg/kg dw	sediment, freshwater	
112-27-6	Triethylene glycol	4.6 mg/kg dw	sediment, marine water	
112-27-6	Triethylene glycol	10 mg/L	sewage treatment plant (STP)	
112-27-6	Triethylene glycol	3.32 mg/kg dw	soil	

* **8.2 Exposure controls*** **Personal protection equipment****Eye/face protection**

Protective goggles according to EN 166, in case of increased risk add protective face shield.

Hand protection

Safety gloves according to EN 374:

Glove material specification [make/type, thickness, permeation time/life]: IIR, >= 0,7 mm, > 480 min

Body protection:

Safety shoes with steel toecap.

Body covering work clothing or chemical resistant suit at increased risk.

* **Respiratory protection**

Keep self contained breathing apparatus readily available for emergency use.

Respiratory protection necessary at:

high concentrations

Do not use any filter apparatus.

* **Environmental exposure controls*** **Remark**

Prevent release to the environment.

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

liquid

* **Colour**

light yellow

Odour

hardly noticeable

Antifrogen SOL HT

Print date 04.07.2024
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Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:			not determined
Melting point/freezing point	Solidification point approx. -28 °C	DIN 51583	
Boiling point or initial boiling point and boiling range	approx. 104 °C pressure 1013 hPa	ASTM D1120	
flammability			The product itself does not burn.
Lower and upper explosion limit			not determined
Flash point			not determined
Auto-ignition temperature	approx. 420 °C	DIN 51794	
Decomposition temperature			No decomposition if used as directed.
pH	approx. 10 (20°C)	DIN 19268	determined undiluted
Viscosity	kinematic approx. 7.4 mm ² /s (20°C)	DIN 51562	
Solubility(ies)	Water solubility (20°C)		soluble
Partition coefficient n-octanol/water (log value)			not applicable
Vapour pressure	< 1 hPa (20°C)	calculated	Information concerns main component.
Density and/or relative density	approx. 1.08 g/cm ³ (20°C)	DIN 51757	
Relative vapour density			not determined
particle characteristics			not applicable

*** 9.2 Other information**

No data available

*** SECTION 10: Stability and reactivity****10.1 Reactivity**

See section "Possibility of hazardous reactions".

*** 10.2 Chemical stability**

The substance is chemically stable under recommended conditions of storage, use and temperature.

*** 10.3 Possibility of hazardous reactions**

Reactions with acids.
 Reactions with strong oxidising agents.

*** 10.4 Conditions to avoid**

Heat sources / heat - risk of bursting.
 Ignition sources, open flames, glowing metal surfaces, etc.

*** 10.5 Incompatible materials**

No data available

10.6 Hazardous decomposition products

When handled and stored appropriately, no dangerous decomposition products are known.

Antifrogen SOL HT

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*** SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008***** Acute toxicity***** Animal data**

	Effective dose	Method, Evaluation	Source, Remark
Acute oral toxicity	LD50: 5000 mg/kg	OECD 423	
Acute dermal toxicity	not determined		
Acute inhalation toxicity	not determined		

*** Assessment/classification**

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

*** Skin corrosion/irritation****Animal data**

Result / Evaluation	Method	Source, Remark
non-irritant.		Information concerns main component.

*** Assessment/classification**

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

*** Serious eye damage/irritation****Animal data**

Result / Evaluation	Method	Source, Remark
non-irritant.		Information concerns main component.

*** Assessment/classification**

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

*** Sensitisation to the respiratory tract***** Assessment/classification**

No data available

*** Skin sensitisation***** Assessment/classification**

No data available

*** Germ cell mutagenicity***** Assessment/classification**

No data available

*** Carcinogenicity***** Assessment/classification**

No data available

*** Reproductive toxicity***** Assessment/classification**

No data available

*** STOT-single exposure***** STOT SE 1 and 2***** Assessment/classification**

No data available

*** STOT-repeated exposure***** Assessment/classification**

No data available

Antifrogen SOL HT

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* **Aspiration hazard**

- * **Assessment/classification**
 No data available

11.2 Information on other hazards**Other information**

The product has not been tested. The information is derived from the properties of the individual components.

* **SECTION 12: Ecological information*** **12.1 Toxicity*** **Aquatic toxicity**

	Effective dose	Method,Evaluation	Source, Remark
Acute (short-term) fish toxicity	LC50: > 10 g/L Species Lepomis macrochirus (Bluegill) Test duration 96 h		Information concerns main component.
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	not determined		
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	not determined		
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

* **12.2 Persistence and degradability**

	Value	Method	Source, Remark
Biodegradation	Degradation rate 95 % Test duration 14 d	OECD 302B/ ISO 9888/ EEC 92/69/V, C.9	Information concerns main component.

* **12.3 Bioaccumulative potential**

No data available

* **12.4 Mobility in soil**

No data available

12.5 Results of PBT and vPvB assessment

The substance/mixture does not contain components meeting the PBT/vPvB criteria of the Reach Regulation, Annex XIII, at levels of 0.1% or higher.

* **12.6 Endocrine disrupting properties**

No data available

* **12.7 Other adverse effects**

No data available

* **SECTION 13: Disposal considerations*** **13.1 Waste treatment methods****Waste codes/waste designations according to EWC/AVV**

Waste code product	Waste name
160114 *	antifreeze fluids containing hazardous substances

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- * **Appropriate disposal / Product**
 Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
 Prevent release to the environment. No disposal via the sewage.
 Disposal according to local regulations.
- * **Appropriate disposal / Package**
 Disposal according to local regulations.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	-	-	-
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	-	-	-

14.6 Special precautions for user

The protective measures listed in Sections 6, 7 and 8 of the Safety Data Sheet have to be considered.

14.7 Maritime transport in bulk according to IMO instruments

No carriage in bulk.

Land transport (ADR/RID)**Remark**

Not classified for this transport carrier.

Sea transport (IMDG)**Remark**

No hazardous material as defined by the prescriptions.

Air transport (ICAO-TI / IATA-DGR)**Remark**

No hazardous material as defined by the prescriptions.

* **SECTION 15: Regulatory information*** **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture*** **Other regulations (EU)*** **To follow:**

National and local regulations concerning chemicals shall be observed.

* **15.2 Chemical Safety Assessment*** **National regulations**

Chemical safety assessments for substances in this mixture were carried out.

* **SECTION 16: Other information****Key literature references and sources for data**

Information from our suppliers and data from the "GESTIS Substances Database" and the "Registered Substances" database of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

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Additional information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes

* Data changed compared with the previous version