

Antifrogen SOL HT Conc.

Page 1(14)

Substance key: 000000422524

Revision Date: 06.02.2018

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

1.1. Product identifier

Trade name

Antifrogen SOL HT Conc.

Material number: 241216

Chemical nature: Mixture of higher boiling glycols with corrosion inhibitors

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Industry sector : Functional Fluids
Type of use : Heat transfer fluids

1.3. Details of the supplier of the safety data sheet

Identification of the company

Clariant Produkte (Deutschland) GmbH
65926 Frankfurt am Main
Telephone no. : +49 69 305 18000

Information about the substance/mixture

BU Industrial & Consumer Specialties
Product Stewardship
e-mail: SDS.Europe@clariant.com

1.4. Emergency telephone number

00800-5121 5121 (24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Additional Labelling

EUH210 Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

According to the present state of knowledge provided this product is handled correctly, there is no danger to humans or the environment

Antifrogen SOL HT Conc.

Page 2(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Sodium benzoate	532-32-1 208-534-8 01-2119460683-35 01-2119460683-35- XXXX	Eye Irrit. 2; H319	>= 1 - < 3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Remove/Take off immediately all contaminated clothing.
Get medical advice/ attention if you feel unwell.
- If inhaled : If inhaled, remove to fresh air.
Get medical advice/ attention.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty
of water.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty
of water and seek medical advice.
- If swallowed : If swallowed do not induce vomiting, seek medical advice and
show safety datasheet or label

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known currently.
- Risks : No hazards known at this time.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray jet
Alcohol-resistant foam
Dry powder

Antifrogen SOL HT Conc.

Page 3(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

Carbon dioxide (CO₂)

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
Carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment for firefighters : Self-contained breathing apparatus

Further information : Wear suitable protective equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear suitable protective equipment.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

Information regarding Safe handling, see chapter 7., For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : When used and handled appropriately no special measures are needed

Advice on protection against fire and explosion : Observe the general rules of industrial fire protection

Hygiene measures : Wash hands before breaks and at the end of workday. Use protective skin cream before handling the product. Take off

Antifrogen SOL HT Conc.

Page 4(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

immediately all contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions : Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care. hygroscopic

7.3 Specific end use(s)

Specific use(s) : No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Hexanoic acid, 3,5,5-trimethyl- CAS-No.: 3302-10-1	Workers	Skin contact	Long-term systemic effects	2 mg/kg bw/day
Remarks:	DNEL			
	Workers	Inhalation	Long-term systemic effects	7 mg/m3
Remarks:	DNEL			
	Consumer use	Skin contact	Long-term systemic effects	1 mg/kg bw/day
Remarks:	DNEL			
	Consumer use	Inhalation	Long-term systemic effects	2 mg/m3
Remarks:	DNEL			
	Consumer use	Ingestion	Long-term systemic effects	1 mg/kg bw/day
Remarks:	DNEL			
Sodium benzoate CAS-No.: 532-32-1	Workers	Inhalation	Long-term systemic effects	3 mg/m3
Remarks:	DNEL			
	Workers	Inhalation	Long-term local effects	0,1 mg/m3
Remarks:	DNEL			
	Workers	Skin contact	Long-term systemic effects	62,5 mg/kg bw/day
Remarks:	DNEL			
	General population	Inhalation	Long-term systemic effects	1,5 mg/m3
Remarks:	DNEL			
	General population	Inhalation	Long-term local effects	0,06 mg/m3
Remarks:	DNEL			
	General	Skin contact	Long-term systemic effects	31,25 mg/kg

Antifrogen SOL HT Conc.

Page 5(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

	population		effects	bw/day
Remarks:	DNEL			
	General population	Ingestion	Long-term systemic effects	16,6 mg/kg bw/day
Remarks:	DNEL			
Reaction mass of 2,2'-(ethylenedioxy)diethanol and 3,6,9-trioxaundecane-1,11-diol	Workers	Inhalation	Long-term systemic effects	50 mg/m3
Remarks:	DNEL			

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Hexanoic acid, 3,5,5-trimethyl- CAS-No.: 3302-10-1	Fresh water	0,068 mg/l
	Marine water	0,0068 mg/l
	intermittent releases	1,36 mg/l
	Sewage treatment plant	23 mg/l
	Fresh water sediment	0,904 mg/kg
	Marine sediment	0,0904 mg/kg
	Soil	0,141 mg/kg
Sodium benzoate CAS-No.: 532-32-1	Fresh water	0,13 mg/l
	Marine water	0,013 mg/l
	Water (intermittent release)	305 µg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	1,76 mg/kg dry weight (d.w.)
	Marine sediment	0,176 mg/kg dry weight (d.w.)
	Soil	0,276 mg/kg dry weight (d.w.)
Reaction mass of 2,2'-(ethylenedioxy)diethanol and 3,6,9-trioxaundecane-1,11-diol	Oral	300 mg/kg food
	Fresh water	10 mg/l
	salt water	1 mg/l
	Water (intermittent release)	10 mg/l
	Fresh water sediment	20,9 mg/kg dry weight (d.w.)
	Soil	1,53 mg/kg dry weight (d.w.)
	Sewage treatment plant	199,5 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

Hand protection

Break through time : 480 min

Antifrogen SOL HT Conc.

Page 6(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

Glove thickness	:	0,7 mm
Remarks	:	Long-term exposure Impervious butyl rubber gloves
Break through time	:	30 min
Glove thickness	:	0,4 mm
Remarks	:	For short-term exposure (splash protection): Nitrile rubber gloves.
Remarks	:	These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.
Respiratory protection	:	Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure Full mask to standard DIN EN 136 Filter A (organic gases and vapours) to standard DIN EN 141 The use of filter apparatus presupposes that the environment atmosphere contains at least 17% oxygen by volume, and does not exceed the maximum gas concentration, usually 0.5% by volume. Relevant guidelines to be considered include EN 136/141/143/371/372 as well as other national regulations.
Protective measures	:	Observe the usual precautions for handling chemicals.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	Liquid
Colour	:	light yellow
Odour	:	characteristic
Odour Threshold	:	not tested.
pH	:	approx. 10 Concentration: 500 g/l Method: DIN 19268
Melting point	:	approx. -56 °C Method: DIN 51583
Boiling point	:	approx. 156 °C Method: ASTM D 1120
Flash point	:	approx. 188 °C Method: ASTM D 6520
Evaporation rate	:	not tested.

Antifrogen SOL HT Conc.

Page 7(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

Burning number	:	Not applicable
Upper explosion limit / upper flammability limit	:	not tested.
Lower explosion limit / Lower flammability limit	:	not tested.
Vapour pressure	:	0,015 Pa (20 °C) Method: Calculated by Syracuse.
Relative vapour density	:	not tested.
Density	:	approx. 1,13 g/cm ³ (20 °C) Method: DIN 51757
Bulk density	:	Not applicable
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	not tested. Solvent: fat
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	approx. 370 °C Method: DIN 51794
Decomposition temperature	:	> 250 °C Method: DSC Measurement under nitrogen
Viscosity		
Viscosity, dynamic	:	approx. 75 mPa.s (23 °C) Method: calculated
Viscosity, kinematic	:	approx. 66 mm ² /s (23 °C) Method: DIN 51562
Explosive properties	:	Not explosive Method: Expert judgement
Oxidizing properties	:	The substance or mixture is not classified as oxidizing. Method: Expert judgement

9.2 Other information

Metal corrosion rate	:	< 6,25 mm/a
Minimum ignition energy	:	not tested.

Antifrogen SOL HT Conc.

Page 8(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

Particle size : Not applicable

Self-ignition : Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3. "Possibility of hazardous reactions"

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : not known

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Remarks: not tested.

Acute dermal toxicity : Remarks: not tested.

Components:

Sodium benzoate:

Acute oral toxicity : LD50 (Rat): 2.100 mg/kg

Skin corrosion/irritation

Product:

Remarks: not tested.

Antifrogen SOL HT Conc.

Page 9(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

Components:

Sodium benzoate:

Species: Rabbit

Assessment: No skin irritation

Method: OECD Test Guideline 404

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Remarks: not tested.

Components:

Sodium benzoate:

Species: Rabbit

Assessment: Irritating to eyes.

Result: Eye irritation

Respiratory or skin sensitisation

Product:

Remarks: not tested.

Germ cell mutagenicity

Product:

Germ cell mutagenicity-
Assessment : No information available.

Carcinogenicity

Product:

Carcinogenicity -
Assessment : No information available.

Reproductive toxicity

Product:

Reproductive toxicity -
Assessment : No information available.

No information available.

STOT - single exposure

Product:

Remarks: not tested.

Antifrogen SOL HT Conc.

Page 10(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

STOT - repeated exposure

Product:

Remarks: not tested.

Repeated dose toxicity

Product:

Remarks: not tested.

Further information

Product:

Remarks: no data available

The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: not tested.

Toxicity to daphnia and other aquatic invertebrates : Remarks: not tested.

Toxicity to algae : Remarks: not tested.

Toxicity to microorganisms : Remarks: not tested.

Components:

Sodium benzoate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 484 mg/l
Exposure time: 96 h

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: not tested.

Components:

Sodium benzoate:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 90 %

Antifrogen SOL HT Conc.

Page 11(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not tested.

Components:

Sodium benzoate:

Bioaccumulation : Remarks: Test data for the substance are not available.

12.4 Mobility in soil

Product:

Distribution among environmental compartments : Remarks: not tested.

Components:

Sodium benzoate:

Distribution among environmental compartments : Remarks: Test data for the substance are not available.

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

Components:

Sodium benzoate:

Assessment : Remarks: no data available

12.6 Other adverse effects

Product:

Environmental fate and pathways : no data available

Additional ecological information : This information is not available.
The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.

Components:

Sodium benzoate:

Additional ecological information : slightly water endangering

Antifrogen SOL HT Conc.

Page 12(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities
- Contaminated packaging : Packaging that cannot be cleaned should be disposed of as product waste

SECTION 14: Transport information

Section 14.1. to 14.5.

ADR	not restricted
ADN	not restricted
RID	not restricted
IATA	not restricted
IMDG	not restricted

14.6. Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code (International Bulk Chemicals Code)

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable
- Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Other regulations:

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

Antifrogen SOL HT Conc.

Page 13(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

15.2 Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: Other information

Full text of H-Statements

H319 : Causes serious eye irritation.

Full text of other abbreviations

Eye Irrit. : Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : Observe national and local legal requirements

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Antifrogen SOL HT Conc.

Page 14(14)

Substance key: 000000422524

Revision Date: 06.02.2018

Version : 2 - 7 / EU

Date of printing : 05.02.2019

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