

# Safety Data Sheet in accordance with Regulation (EC) No 1907/2006

**Antifrogen SOL HT**

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Substance key: 000000324944  
Version : 1 - 1 / EU

Revision Date: 04.06.2008  
Date of printing : 30.06.2008

## 1. Identification of the substance/preparation and of the company/undertaking

### Trade name

**Antifrogen SOL HT**

### Use of the substance/preparation.

Industry sector : Functional Fluids  
Type of use : Product for solar installations

### Identification of the company

Clariant Produkte (Deutschland) GmbH

65926 Frankfurt am Main  
Telephone no. : +49 69 305 18000

### Information about the substance/preparation

Div. Functional Chemicals/PRODUCT SAFETY  
++49(0)69-305-2092/15315/32251  
e-mail: FUN.EHS@clariant.com

**Emergency telephone number : +49 69 305 6418**

## 2. Hazards identification

No particular hazards known.

The preparation described in this Safety Data Sheet is not classified as dangerous but does contain at least one dangerous component according to Article 14, paragraph 2.1b of the EU Dangerous Preparations Directive 1999/45/EEC

## 3. Composition/information on ingredients

### Chemical characterization

Mixture of higher boiling glycols with corrosion inhibitors

### Hazardous ingredients

Sodium-2-ethylhexanoate  
Concentration : < 1,5 %  
CAS number : 19766-89-3  
EINECS number : 243-283-8  
Hazard symbols Xn  
R phrases 63

The text of the R-phrases is shown in section 16.

## 4. First aid measures

### General information

Remove soiled or soaked clothing immediately

### After inhalation

When inhaled remove to fresh air and seek medical aid.

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**After contact with skin**

In case of contact with skin wash off immediately with soap and water

**After contact with eyes**

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice

**After ingestion**

Summon a doctor immediately.

**5. Fire-fighting measures****Suitable extinguishing media**

Product itself is non-combustible; Fire extinguishing method of surrounding areas must be discussed.

**Special hazards from the substance itself, its combustion products or from its vapours**

In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

Nitrogen oxides (NO<sub>x</sub>)

**Special protective equipment for firefighting**

Use self-contained breathing apparatus

**6. Accidental release measures****Personal precautions**

Wear suitable personal protective equipment.

Ensure adequate ventilation.

**Environmental precautions**

Do not allow to enter drains or waterways

**Methods for cleaning up/taking up**

Take up with absorbent material (eg sand, kieselguhr, universal binder)

**7. Handling and storage****Advice on safe handling**

No special measures necessary if stored and handled as prescribed.

**Requirements for storage rooms and vessels**

Do not use zinc containers.

**8. Exposure controls / personal protection****Occupational exposure controls****General protective measures**

Avoid contact with eyes and skin

**Hygiene measures**

Observe the usual precautions when handling chemicals.

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<b>Respiratory protection :</b>	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.
<b>Hand protection :</b>	For long-term exposure: Butyl rubber gloves. Minimum breakthrough time / gloves : 480 min Minimum thickness / gloves 0,7 mm  For short-term exposure (splash protection): Nitrile rubber gloves. Minimum breakthrough time / gloves : 30 min Minimum thickness / gloves 0,4 mm  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.
<b>Eye protection :</b>	safety glasses

**9. Physical and chemical properties**

<b>Form :</b>	Liquid
<b>Colour :</b>	blue-green
<b>Odour :</b>	slightly perceptible
<b>Melting point :</b>	approx. -28 °C Method : DIN 51583
<b>Boiling temperature :</b>	approx. 105 °C Method : ASTM D 1120
<b>Flash point :</b>	Not flammable (water-based)
<b>Ignition temperature :</b>	approx. 420 °C Method : DIN 51794
<b>Oxidizing properties :</b>	Not applicable
<b>Self-ignition temperature :</b>	Not applicable
<b>Flammability</b>	
<b>Lower explosion limit :</b>	not tested.
<b>Upper explosion limit :</b>	not tested.

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<b>Combustion number :</b>	Not applicable
<b>Evaporation rate :</b>	not tested.
<b>Vapour pressure :</b>	< 0,1 kPa (20 °C) Method : Calculated by Syracuse. Data relate to the main component
<b>Density :</b>	approx. 1,08 g/cm <sup>3</sup> (20 °C) Method : DIN 51757
<b>Bulk density :</b>	Not applicable
<b>Vapour density in relation to air :</b>	not tested.
<b>Solubility in water :</b>	(20 °C) soluble
<b>Soluble in ... :</b>	fat not tested.
<b>pH value :</b>	approx. 9 Determined in the undiluted form
<b>Octanol/water partition coefficient (log Pow) :</b>	Not applicable
<b>Viscosity (dynamic) :</b>	approx. 8 mPa.s Method : calculated
<b>Viscosity (kinematic) :</b>	approx. 7,4 mm <sup>2</sup> /s Method : DIN 51562

**10. Stability and reactivity**

<b>Thermal decomposition :</b>	approx. 204 °C Method : DSC Data indicate that decomposition starts on contact with air/oxygen. In the absence of air/oxygen, no decomposition occurs below a temperature of at least 300 °C.
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**Hazardous reactions**Reactions with acids.  
Incompatible with oxidizing materials.**11. Toxicological information**

<b>Acute oral toxicity :</b>	not tested.
<b>Acute inhalation toxicity :</b>	not tested.
<b>Acute dermal toxicity :</b>	not tested.

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Date of printing : 30.06.2008**Irritant effect on skin :** not tested.**Irritant effect on eyes :** not tested.**Sensitization :** not tested.**Mutagenicity :** not tested.**Remarks**

The product was classified on the basis of the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

**12. Ecological information****Remarks**

Classification according to the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

**13. Disposal considerations****Product**

In accordance with local authority regulations, take to special waste incineration plant

**14. Transport information****ADR** not restricted**ADNR** not restricted**RID** not restricted**IATA** not restricted**IMDG** not restricted**15. Regulatory information****Labelling in accordance with EC-Directives**

Classification according to the calculation procedure of the Dangerous Preparations Directive (1999/45/EC).

The product does not require a hazard warning label in accordance with EC Directives

**Chemical Safety Assessment**

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

**Special labelling for certain preparations**

Safety Data Sheet available for professional user on request.

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**16. Other information****Text of the R-phrases assigned to the ingredients/components mentioned in section  
3 :**

63 Possible risk of harm to the unborn child.

Decimal notation: "Thousands" places are identified with a dot (example: 2.000 mg/kg means "two thousand mg/kg"). Decimal places are identified with a comma (example: 1,35 g/cm<sup>3</sup>).

The data are based on the current state of our knowledge, and are intended to describe the product with regard to the requirements of safety. The data should not be taken to imply any guarantee of a particular or general specification. It is the responsibility of the user of the product to ensure to his satisfaction that the product is suitable for the intended purpose and method of use. We do not accept responsibility for any harm caused by the use of this information. In all cases, our general conditions of sale apply.