

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006,
as amended

CLARIANT 

ANTIFROGEN L

Page 1(13)

Substance key: SXR089131

Revision Date: 18.06.2026

Date of last issue: 02.07.2025

Version : 6 - 0 / EU

Date of printing : 06.07.2026

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

1.1. Product identifier

Trade name

ANTIFROGEN L

Material number: 107600

Chemical nature:

Propane-1,2-diol 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:

Brine for refrigeration

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 Care Chemicals

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.

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

No additional hazards are known except those derived from the labelling.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

- | | | |
|-------------------------|---|--|
| General advice | : | Move out of dangerous area.
Get medical advice/ attention if you feel unwell.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended. |
| If inhaled | : | Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
Never give anything by mouth to an unconscious person.
Get immediate medical advice/ attention. |
| In case of skin contact | : | If on skin, rinse well with water.
Take off all contaminated clothing immediately.
If skin irritation occurs, seek medical advice/attention. |
| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Get immediate medical advice/ attention.
If easy to do, remove contact lens, if worn.
Protect unharmed eye.
Keep eye wide open while rinsing. |
| If swallowed | : | Rinse mouth with water.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Obtain medical attention. |

4.2 Most important symptoms and effects, both acute and delayed

- | | | |
|----------|---|---|
| Symptoms | : | The possible symptoms known are those derived from the labelling (see section 2). |
| Risks | : | The possible health hazards known are those derived from the labelling (see corresponding section) and/or provided in this section. |

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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
Carbon dioxide (CO₂)
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides
Hydrocarbons

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : In the event of fire and/or explosion do not breathe fumes.
Do not allow run-off from fire fighting to enter drains or water courses.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Remove all sources of ignition.
Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

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 : Prevent product from entering drains.
Soak up with inert absorbent material (e.g. sand, silica gel,

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acid binder, universal binder, sawdust).
Clean contaminated surface thoroughly.
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 : Use only with adequate ventilation/personal protection.
For personal protection see section 8.
Avoid contact with skin, eyes and clothing.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Advice on protection against fire and explosion : Keep away from heat and sources of ignition. Observe the general rules of industrial fire protection
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Use protective skin cream before handling the product. Wash hands before breaks and at the end of workday. Take off immediately all contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Handle and open container with care. Keep away from sources of ignition - No smoking.
- Advice on common storage : Keep away from oxidizing agents.
Do not store with strong alkalies.
- Further information on storage stability : Stable under recommended storage conditions.

7.3 Specific end use(s)

- Specific use(s) : No further recommendations.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

8.2 Exposure controls

Engineering measures

Use engineering controls such as local or general exhaust to maintain airborne concentrations below exposure limits.

Personal protective equipment

Eye/face protection : Wear safety glasses with side shields or goggles.
Do not wear contact lenses.

Hand protection

Break through time : 480 min

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.

Skin and body protection : Wear protective clothing, including long sleeves and gloves, to prevent skin contact.

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Equipment should conform to EN 14387

Filter type : Combined particulates, inorganic and acidic gas/vapour, ammonia/amines and organic vapour type (ABEK-P)

Protective measures : Observe the usual precautions for handling chemicals.
Avoid breathing dust or vapour.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid

Colour : blue

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Odour	:	perceptible
Odour Threshold	:	no data available
Melting point	:	approx. -58 °C Method: DIN 51583
Boiling point	:	approx. 155 °C (1.013 hPa) Method: ASTM D 1120
Upper explosion limit / upper flammability limit	:	12,6 %(V) Data relate to solvent
Lower explosion limit / Lower flammability limit	:	2,6 %(V) Data relate to solvent
Flash point	:	approx. 105 °C Method: ASTM D6450 (closed cup)
Auto-ignition temperature	:	> 450 °C Method: DIN 51794
Decomposition temperature	:	> 250 °C Method: DSC Measurement under nitrogen
pH	:	approx. 9 (20 °C) Concentration: 300 g/l Method: DIN 19268
Viscosity		
Viscosity, dynamic	:	approx. 62 mPa.s Method: calculated
Viscosity, kinematic	:	approx. 59 mm ² /s (20 °C) Method: DIN 51562
Solubility(ies)		
Water solubility	:	(20 °C) miscible
Partition coefficient: n-octanol/water	:	Not applicable
Vapour pressure	:	< 0,01 kPa (20 °C)

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Method: Calculated by Syracuse.

Density : approx. 1,043 g/cm³ (20 °C)
Method: DIN 51757

Relative vapour density : no data available

Particle characteristics
Particle size : Does not apply to liquids.

9.2 Other information

Self-ignition : The substance or mixture is not classified as self heating.

Metal corrosion rate : < 6,25 mm/a

Evaporation rate : no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reactions with strong alkalies.
Incompatible with oxidizing agents.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified

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Product:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 423
Remarks: By analogy with a product of similar composition

Skin corrosion/irritation

Not classified due to lack of data.

Product:

Result : not determined

Serious eye damage/eye irritation

Not classified due to lack of data.

Product:

Result : not determined

Respiratory or skin sensitisation

Skin sensitisation

Not classified

Respiratory sensitisation

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

STOT - single exposure

Not classified

STOT - repeated exposure

Not classified

Aspiration toxicity

Not classified

11.2 Information on other hazards

Endocrine disrupting properties

Not classified

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

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levels of 0.1% or higher.

Further information

Product:

Remarks : 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 : LC50 (Leuciscus idus (Golden orfe)): 1.400 mg/l
Exposure time: 48 h
Remarks: By analogy with a product of similar composition

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 10 g/l
aquatic invertebrates : Method: OECD Test Guideline 202
Remarks: By analogy with a product of similar composition

Toxicity to algae/aquatic : EC50 (Desmodesmus subspicatus (green algae)): > 1.000
plants : mg/l
Method: OECD Test Guideline 201
Remarks: By analogy with a product of similar composition

Toxicity to microorganisms : EC10 : > 1.000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
Remarks: By analogy with a product of similar composition

12.2 Persistence and degradability

Product:

Biodegradability : Biodegradation: 99 %
Exposure time: 2 d
Method: OECD Test Guideline 302B
Remarks: Information refers to the 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

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.

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12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

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

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. Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Conditions of restriction for the following entries must be considered:: Number on list 40: 3,5,5-trimethylhexanal Number on list 75: If you intend to use this product as tattoo ink, please contact your vendor.
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not applicable
Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors	: Neither banned nor restricted
Council Regulation (EC) No 273/2004 on drug precursors	: Not applicable
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	Not applicable

Other regulations:

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

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.

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SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; BGW - Biological Limit Values; 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 Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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); LSPN - List of Hazardous Notified Substances (Chile); 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 - Organisation 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; TECI - Thailand Existing Chemicals 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

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

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