

ANTIFROGEN L WATER-MIXTURE 25%	Page 1(12)
Substance key: SXR089053	Revision Date: 29.01.2019
Version : 3 - 4 / EU	Date of printing : 17.06.2020

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

#### 1.1. Product identifier

#### Trade name ANTIFROGEN L WATER-MIXTURE 25%

#### Material number: 121162

Chemical nature:

Mono propylene glycole (1,2-propandiol) with corrosion inhibitors, water mixture

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

Relevant identified uses of the substance or mixtureIndustry sector :Functional FluidsType 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 Industrial & Consumer Specialties Product Stewardship e-mail: SDS.Europe@clariant.com

#### 1.4. Emergency telephone number

00800-5121 5121

#### **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.

This substance/mixture contains no components considered to be either persistent,

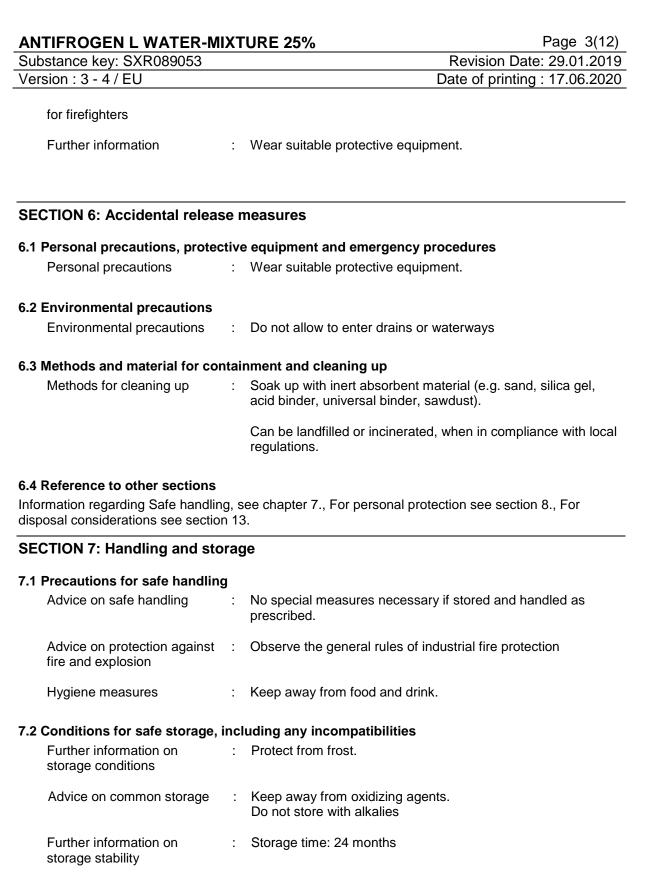
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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



ANTIFROGEN L WATER-N Substance key: SXR089053		FURE 25% Page 2(12) Revision Date: 29.01.2019
Version : 3 - 4 / EU		Date of printing : 17.06.2020
SECTION 3: Composition/in	form	nation on ingredients
3.2 Mixtures		
Components		
Remarks	:	No hazardous ingredients
SECTION 4: First aid measu	res	
4.1 Description of first aid mea	sure	S
General advice	:	Remove/Take off immediately all contaminated clothing. Move the victim to fresh air.
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 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	:	Get medical attention immediately.
4.2 Most important symptoms	and e	effects, both acute and delayed
Symptoms	:	No symptoms known currently.
Risks	:	No hazards known at this time.
4.3 Indication of any immediate	e me	dical attention and special treatment needed
Treatment	:	Treat symptomatically.
SECTION 5: Firefighting me	asur	es
5.1 Extinguishing media		
Suitable extinguishing media	a :	Not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
5.2 Special hazards arising from	m the	e substance or mixture
Specific hazards during firefighting	:	In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO) Nitrogen oxides (NOx)
5.3 Advice for firefighters		
-	<b>.</b> .	Solf-contained breathing apparatus

Special protective equipment : Self-contained breathing apparatus



7.3 Specific end use(s)

Specific use(s) : No further recommendations.





ANTIFROGEN L WATER-MIXTURE 25%	Page 4(12)
Substance key: SXR089053	Revision Date: 29.01.2019
Version : 3 - 4 / EU	Date of printing : 17.06.2020

#### **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
Propylene Glycol CAS-No.: 57-55-6	Workers	Inhalation	Long-term systemic effects	168 mg/m3
Remarks:	DNEL			
	Workers	Inhalation	Long-term local effects	10 mg/m3
Remarks:	DNEL			
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
Remarks:	DNEL	<u>.</u>		
	Consumers	Inhalation	Long-term local effects	10 mg/m3
Remarks:	DNEL			
Propylene Glycol CAS-No.: 57-55-6	Workers	Inhalation	Long-term systemic effects	168 mg/m3
Remarks:	DNEL		·	
	Workers	Inhalation	Long-term local effects	10 mg/m3
Remarks:	DNEL	<u>.</u>		
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
Remarks:	DNEL			
	Consumers	Inhalation	Long-term local effects	10 mg/m3
Remarks:	DNEL			

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

Substance name	Environmental Compartment	Value
Propylene Glycol	Fresh water	260 mg/l
CAS-No.: 57-55-6		_
	Marine water	26 mg/l
	Intermittent use/release	183 mg/l
	Sewage treatment plant	20000 mg/l
	Fresh water sediment	572 mg/kg dry
		weight (d.w.)
	Marine sediment	57,2 mg/kg dry
		weight (d.w.)
	Soil	50 mg/kg dry
		weight (d.w.)
Propylene Glycol	Fresh water	260 mg/l
CAS-No.: 57-55-6		
	Marine water	26 mg/l
	Intermittent use/release	183 mg/l



#### ANTIFROGEN L WATER-MIXTURE 25%

-	-	-	
Substance	key: SXR089053		

Page 5(12) Revision Date: 29.01.2019

Revision Date.	29.01.2019
Date of printing :	17.06.2020

Sewage treatment plant	20000 mg/l
Fresh water sediment	572 mg/kg dry weight (d.w.)
Marine sediment	57,2 mg/kg dry weight (d.w.)
Soil	50 mg/kg dry weight (d.w.)

#### 8.2 Exposure controls

Version : 3 - 4 / EU

#### Personal protective equipment

Eye protection	:	Safety glasses
Hand protection Break through time Glove thickness Remarks		480 min 0,7 mm Long-term exposure Impervious butyl rubber gloves
Break through time Glove thickness Remarks		30 min 0,4 mm 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	:	Do not inhale vapours

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Appearance	:	Liquid
Colour	:	blue
Odour	:	perceptible
Odour Threshold	:	not tested.



		Data of existing 147.00.00
rsion : 3 - 4 / EU		Date of printing : 17.06.20
рН	:	approx. 9 (20 °C) Method: DIN EN 1262 Determined in the undiluted form
Melting point	:	approx10 °C Method: ASTM D 1177
Boiling point	:	approx. 102 °C (1.013 hPa) Method: ASTM D 1120 Test result of a related preparation.
Flash point	:	Method: DIN 51758 No flash point - Measure made up to the boiling point.
Evaporation rate	:	not tested.
Flammability (solid, gas)	:	Not applicable
Burning number	:	Not applicable
Upper explosion limit / upper flammability limit	:	not tested.
Lower explosion limit / Lower flammability limit	:	not tested.
Vapour pressure	:	< 0,01 kPa (20 °C) Method: Calculated by Syracuse. Data relate to solvent
Relative vapour density	:	not tested.
Density	:	approx. 1,02 g/cm3 (20 °C) Method: DIN 51757
Bulk density	:	Not applicable
Solubility(ies) Water solubility	:	completely miscible (20 °C)
Solubility in other solvents	:	not tested. Solvent: fat
Partition coefficient: n- octanol/water	:	Not applicable
Auto-ignition temperature	:	not tested.
Decomposition temperature	:	> 200 °C Method: DSC By analogy with a product of similar composition



ANTIFROGEN L WATER-MIXTURE 25%	
	Revision Date: 29.01.2019
	Date of printing : 17.06.2020
: approx. 2,5 mPa.s (20 °C) Method: calculated	
: approx. 2,5 mm2/s (20 °C) Method: DIN 51562	
: no data available	
: Not applicable	
: not tested.	
: Not applicable	
: The substance or mixture is	not classified as self heating.
	<ul> <li>approx. 2,5 mPa.s (20 °C) Method: calculated</li> <li>approx. 2,5 mm2/s (20 °C) Method: DIN 51562</li> <li>no data available</li> <li>Not applicable</li> <li>not tested.</li> <li>Not applicable</li> </ul>

#### **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 re	actio	ns
Hazardous reactions	:	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 toxicological effects

#### Acute toxicity

#### Product:

Acute oral toxicity	: Remarks: not tested.
Acute inhalation toxicity	: Remarks: not tested.
Acute dermal toxicity	: Remarks: not tested.



estence key CVD00052		Devision Dates 20.01.20
ostance key: SXR089053 sion : 3 - 4 / EU		Revision Date: 29.01.20 Date of printing : 17.06.20
SIGH . 3 - 4 / EU		Date of printing . 17.00.20
Skin corrosion/irritation		
Product:		
Remarks	: not tested.	
Serious eye damage/eye i	rritation	
Product:		
Remarks	: not tested.	
Respiratory or skin sensit	isation	
Product:		
Remarks	: not tested.	
Germ cell mutagenicity		
Product:		
Germ cell mutagenicity- Assessment	: No information available	
0		
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.	
STOT - repeated exposure		
Product:		
Remarks	: not tested.	
Repeated dose toxicity		
Product:		
Remarks	: not tested.	



ANTIFROGEN L WATER-MI Substance key: SXR089053		FURE 25% Page 9(12) Revision Date: 29.01.2019
Version : 3 - 4 / EU		Date of printing : 17.06.2020
Further information		
<u>Product:</u> Remarks		The electric was made by the conventional (coloulation)
Remarks	•	The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.
SECTION 12: Ecological infor	ma	ation
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 aquatic invertebrates	:	Remarks: not tested.
Toxicity to algae	:	Remarks: not tested.
Toxicity to microorganisms	:	EC10 : > 1.000 mg/l Method: OECD Test Guideline 209 Remarks: By analogy with a product of similar composition
12.2 Persistence and degradabili	itv	
Product:	, y	
Biodegradability	:	Biodegradation: 99 % Exposure time: 2 d Method: OECD Test Guideline 302B Remarks: Information refers to the main component.
12.3 Bioaccumulative potential		
Product:		
Bioaccumulation	:	Remarks: not tested.
12.4 Mobility in soil		
Product:		
Distribution among environmental compartments	:	Remarks: not tested.
12.5 Results of PBT and vPvB as	se	ssment
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



ANTIFROGEN L WATER-MI	XTURE 25%	Page 10(12)
Substance key: SXR089053		Revision Date: 29.01.2019
Version : 3 - 4 / EU		Date of printing : 17.06.2020
	: This substance/mixture contain to be either persistent, bioaccur very persistent and very bioacc 0.1% or higher	mulative and toxic (PBT), or
12.6 Other adverse effects		
Product:		
Environmental fate and pathways	: no data available	
Additional ecological information	: The classification was made by method of the CLP Regulation	· · · · · · · · · · · · · · · · · · ·
	Determined in the undiluted for	m

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product	:	Dispose of in accordance with local regulations.
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
ΙΑΤΑ	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

Other regulations:



ANTIFROGEN L WATER-MIXTURE 25%	Page 11(12)
Substance key: SXR089053	Revision Date: 29.01.2019
Version : 3 - 4 / EU	Date of printing : 17.06.2020

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

Theshold limit value (German MAK-value) not determined.

#### 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 other abbreviations

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



ANTIFROGEN L WATER-MIXTURE 25%	Page 12(12)
Substance key: SXR089053	Revision Date: 29.01.2019
Version : 3 - 4 / EU	Date of printing : 17.06.2020

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application. Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial 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 and review the applicable Material Safety Data Sheet contact Clariant.

REG\_EU / EN