according to Regulation (EC) No. 1907/2006



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

1.1. Product identifier

Trade name

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Material number: 121165

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 mixture

Industry sector : Functional Fluids
Type of use : Functional Fluids
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.

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

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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 : 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 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 : Not combustible.

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

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) Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment : Self-contained breathing apparatus

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for firefighters

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.

6.2 Environmental precautions

Environmental precautions : Do not allow to enter drains or waterways

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).

Can be landfilled or incinerated, when in compliance with local

regulations.

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 : No special measures necessary if stored and handled as

prescribed.

Advice on protection against :

fire and explosion

Observe the general rules of industrial fire protection

Hygiene measures : Keep away from food and drink.

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.

Advice on common storage : Keep away from oxidizing agents.

Do not store with alkalies

Further information on

storage stability

Storage time: 24 months

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

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			
	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 CAS-No.: 57-55-6	Fresh water	260 mg/l
	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.)

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

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

according to Regulation (EC) No. 1907/2006



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> 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.

Use respiratory protection in case of insufficient exhaust Respiratory protection

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

Liquid **Appearance**

Colour blue

Odour perceptible

Odour Threshold not tested.

рΗ approx. 9 (20 °C)

Method: DIN EN 1262

Determined in the undiluted form

approx. -19 °C Melting point

Method: ASTM D 1177

Boiling point : approx. 104 °C

> (10130,000 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.

according to Regulation (EC) No. 1907/2006



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Lower explosion limit / Lower : not tested.

flammability limit

Vapour pressure : < 0,01 kPa (20 °C)

Method: Calculated by Syracuse.

Data relate to solvent

Relative vapour density not tested.

Density approx. 1,03 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

Viscosity

Viscosity, dynamic approx. 4,2 mPa.s

Method: calculated

Viscosity, kinematic approx. 4,0 mm2/s (20 °C)

Method: DIN 51562

Explosive properties no data available

Oxidizing properties Not applicable

9.2 Other information

Metal corrosion rate Not corrosive to metals

Minimum ignition energy not tested.

Particle size Not applicable

Self-ignition not tested.

according to Regulation (EC) No. 1907/2006



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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 : 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 : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Remarks: not tested.

Acute dermal toxicity : Remarks: not tested.

Skin corrosion/irritation

Product:

Remarks : not tested.

Serious eye damage/eye irritation

Product:

Remarks : not tested.

Respiratory or skin sensitisation

Product:

Remarks : not tested.

according to Regulation (EC) No. 1907/2006



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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.

STOT - repeated exposure

Product:

Remarks : not tested.

Repeated dose toxicity

Product:

Remarks : not tested.

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

according to Regulation (EC) No. 1907/2006



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Toxicity to daphnia and other :

aquatic invertebrates

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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 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

Product:

Bioaccumulation : Remarks: not tested.

12.4 Mobility in soil

Product:

Distribution among

Remarks: not tested.

environmental compartments

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...

12.6 Other adverse effects

Product:

Environmental fate and

pathways

: no data available

Additional ecological

information

The classification was made by the conventional (calculation)

method of the CLP Regulation (EC) No 1272/2008.

Determined in the undiluted form

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

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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

Other regulations:

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

The shold 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

according to Regulation (EC) No. 1907/2006



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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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