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

1.1. Product identifier

Name of product	Aqua Frozt Art-Nr 01.0063.00
Name of substance	1,2-Propylenglycol
REACH registration number	01-2119456809-23-XXXX
CAS No	57-55-6

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

Recommended intended purpose(s)

Antifreeze

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor	Yachticon A. Nagel GmbH Hans-Böckler-Ring 33, D-22851 Norderstedt Phone +49 40 511 37 80, Fax +49 40 51 74 37 E-Mail yachticon@yachticon.de Internet www.yachticon.de
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Advice

Phone +49 40 511 37 80
Fax +49 40 51 74 37
E-mail (competent person):
yachticon@yachticon.de

1.4. Emergency telephone number

Emergency advice

Phone +49 40 511 37 80
This number is only available at office times.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Additional hints

The substance is not classified as hazardous according to Regulation (EC) 1272/2008 [GHS].

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

Precautionary Statements

General

P102 Keep out of reach of children.

2.3. Other hazards

Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

SECTION 3: Composition/ information on ingredients

CAS No 57-55-6 **1,2-Propylenglycol**
REACH registration number 01-2119456809-23-XXXX

3.2. Mixtures
not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove moisted clothing immediately.
In the event of persistent symptoms receive medical treatment.

In case of inhalation

Ensure of fresh air.

In case of skin contact

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

In case of eye contact

In case of contact with eyes rinse thoroughly with water.

In case of ingestion

Refer to medical treatment.
Rinse out mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam
Dry fire-extinguishing substance
Carbon dioxide
Water spray jet

5.2. Special hazards arising from the substance or mixture

Fire gas of organic material has to be classed invariably as respiratory poison.

In the event of fire the following can be released:

Carbon monoxide (CO)
Carbon dioxide (CO₂)
Can form explosive vapor-air mixtures.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply (isolated).

Additional information

Cool endangered containers with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

High risk of slipping due to leakage / spillage of product.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Use personal protective clothing.

High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

After taking up the material dispose according to regulation.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid formation of aerosols.

Take the usual precautions when handling with chemicals.

Handle in accordance with good industrial hygiene and safety practice.

General protective measures

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

Hygiene measures

Clean skin thoroughly after working.

At work do not eat, drink and smoke.

Remove soiled or soaked clothing immediately.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Advice on storage compatibility

Do not store together with oxidizing agents.

Further information on storage conditions

Store only at temperature of 40°C maximum (=104°F).

Keep container dry, tightly closed and store at cool place.

Protect from heat/overheating.

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Storage group 10

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No information available.

8.2. Exposure controls

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.

Short term: filter apparatus, filter A

Hand protection

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitril, 0,4 mm, 60 min, 480 min. e.g. "Camatril Profi" (KCL GmbH, Email: Vertrieb@kcl.de)

Eye protection

safety goggles

Other protection measures

protective clothing

Appropriate engineering controls

Ensure good ventilation, where necessary use fume hood.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

oily

Colour

colourless

Odour

almost odourless

Odour threshold

No information available.

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 7	20 °C	10 g/l		
boiling point	184 - 188 °C				
melting point	< -20 °C				
Flash point	> 103 °C				
Vapourisation rate	No information available.				
Flammable (solid)	No information available.				
Flammability (gas)	No information available.				
Ignition temperature	>= 371 °C				

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	Value	Temperature	at	Method	Remark
Self ignition temperature	No information available.				
Lower explosion limit	2,6 Vol-%				
Upper explosion limit	12,6 Vol-%				
Vapour pressure	ca. 0,3 mbar				
Relative density	ca. 1,03 g/cm ³	20 °C			
Vapour density	2,6				
Solubility in water		20 °C			multimiscible
Solubility/other	No information available.				
Partition coefficient n-octanol/water (log P O/W)	-0,92	20 °C		n-Octanol/Wasser	
Decomposition temperature	No information available.				
Viscosity dynamic	46 - 50 mPa*s				

Oxidising properties

No information available.

Explosive properties

Could form explosive mixtures with air.

9.2. Other information

Refer to technical data sheet.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with acids, alkalies and oxidising agents.

10.4. Conditions to avoid

Heat, open flames, sparks

10.5. Incompatible materials**Materials to avoid**

Acid chlorides, inorganic

Reactions with strong acids and alkalies.

Reactions with strong oxidising agents.

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Säureanhydride

10.6. Hazardous decomposition products

Concerning possible decomposition products see section 5.

Thermal decomposition

Remark No decomposition if used as directed.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity/Irritability/Sensitization**

	Value/Validation	Species	Method	Remark
LD50 acute oral	20000 - 34000 mg/kg	rat	OECD 401	
LD50 acute dermal	> 20000 mg/kg	rabbit	OECD 402	
Irritability skin	non-irritant			
Irritability eye	non-irritant			
Skin sensitization	No known sensitization.			

Additional information

The product should be handled with the care usual when dealing with chemicals.

Further hazardous properties can not be excluded.

SECTION 12: Ecological information**12.1. Toxicity****Ecotoxicological effects**

	Value	Species	Method	Validation
Fish	LC50 44000 - 51600 mg/l (96 h)	Oncorhynchus mykiss (Regenbogenforelle)		
Daphnia	EC50 4850 - 34000 g/m3 (48 h)	Daphnia magna		
Algae	EC50 19000 g/m3 (72 h)			

12.2. Persistence and degradability

Biological degradability	81,7 % (28 d)	OECD 301F / ISO 9408	readily degradable
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12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

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No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

Behaviour in sewage plant

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

Additional ecological information

	Value	Method	Remark
COD	1585 mgO2/g		

General regulation

Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

There are no harmonised regulations on the disposal of chemicals in the member states of the EU. In Germany the Recycling and Waste Management Act (KrWG) stipulates recycling as a requirement. This means that a distinction must be made between "wastes for recycling" and "wastes for disposal". Particular aspects - in the main concerning delivery - are also governed by the Laender.

Recommendations for packaging

Totally emptied packaging may be taken for recycling.
 Totally emptied packaging may be treated as household waste.
 Disposal according to official regulations.

Recommended cleansing agent

water

General information

Allocation of the waste number has to be done according to the EWC directive industry- and process-specific.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	-	-	-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
14.4. Packing group	-	-	-

	ADR/RID	IMDG	IATA-DGR
14.5. Environmental hazards	-	-	-
14.6. Special precautions for user No information available.			
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.			
Transport/further information No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.			

SECTION 15: Regulatory information

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

National regulations

Water hazard class 1 list substance
slightly hazardous to water

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Training advice

See the technical data sheet for more information.

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

The national special regulations have to be implemented by each user their own responsibility!
The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please note: Our Material Safety Data Sheets have been prepared in accordance with EU directives, WITHOUT taking into account the specific national regulations for handling hazardous materials and chemicals.

Indication of changes: "!" = Data changed compared with the previous version.

Sources of key data used

Data sheets of the suppliers.

Federal Environment Agency (water hazard classes)