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

1.1. Product identifier

Name of product Underwater Hull Cleaner
Art-Nr 1.0201.07517.00000

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

Recommended intended purpose(s)
acidic cleaner

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor Yachticon A. Nagel GmbH
Bürgermeister-Bombeck-Str. 1., D-22851 Norderstedt
Phone +49 40 511 37 80, Fax +49 40 51 74 37
E-Mail yachticon@yachticon.de
Internet www.yachticon.de

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 Giftinformationszentrale Berlin
Phone +49 (0)30 192 40
Information in German.
England, Wales and Scotland dial: 111; Republic of
Ireland dial: 01 809 2166

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Met. Corr. 1	H290	
Skin Corr. 1A	H314	
STOT SE 3	H335	

Hazard statements for physical hazards

H290 May be corrosive to metals.

Hazard statements for health hazards

H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Additional hints

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

2.2. Label elements

Underwater Hull Cleaner

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



GHS05



GHS07

Signal word

Danger

Hazard statements for physical hazards

H290 May be corrosive to metals.

Hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary Statements

General

P102 Keep out of reach of children.

Prevention

P234 Keep only in original container.

P260 Do not breathe gas/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal

P501 Dispose of contents/container to a licensed disposal company.

Hazardous ingredients for labeling

Poly(oxy-1,2-ethanediyl), alpha-(2-ethylhexyl)-omega-hydroxy-, phosphate, sodium salt, Fatty alcohol C12-14 ethoxylated, hydrochloric acid, sulfuric acid, sulfuric acid 96%

Additional information

Special rules on packaging

Touchable warning sign (EN/ISO 11683).

Childproof closures (EN/862/ISO 8317).

2.3. Other hazards

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

! SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
112-34-5	203-961-6	2-(2-butoxyethoxy)ethanol	< 5	Eye Irrit. 2, H319
68439-50-9	Polymer	Alcohols, C12-14, ethoxylated, 7-14 EO	< 5	Acute Tox. 4, H302 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412
7647-01-0	231-595-7	hydrochloric acid, sulfuric acid	5 - 20	Skin Corr. 1B, H314 / STOT SE 3, H335 / Met. Corr. 1, H290 / * / **
111798-26-6		Poly(oxy-1,2-ethanediyl), alpha-(2-ethylhexyl)-omega-hydroxy-, phosphate, sodium salt	< 5	Skin Irrit. 2, H315 / Eye Dam. 1, H318
7664-93-9	231-639-5	sulfuric acid 96%	5 < 10	Skin Corr. 1A, H314 / * / **

REACH

CAS No	Name	REACH registration number
112-34-5	2-(2-butoxyethoxy)ethanol	01-2119475104-44-XXXX
7647-01-0	hydrochloric acid, sulfuric acid	01-2119484862-27-XXXX
7664-93-9	sulfuric acid 96%	01-2119458838-20-XXXX

Additional advice

** Substance specific limits have been taken into account for the classification of the product.

* Substance with a workplace exposure limit (Germany: AGW).

Labelling for contents according to regulation (EC) No 648/2004, annex VII

less than 5 % anionic surfactants

less than 5 % non-ionic surfactants

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately and dispose it safely.

In case of accident or if you feel unwell seek medical advice immediately (show operating instruction or safety data sheet, if possible).

In case of inhalation

Remove the casualty to fresh air and keep warm and at rest.

Rinse nose and mouth with water.

If intensive inhalation of fumes seek medical treatment immediately.

In case of skin contact

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

Consult a doctor if symptoms occur, and if skin irritation persists.

In case of eye contact

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

Remove contact lenses

In case of ingestion

Call for a doctor immediately.

Rinse out mouth and give plenty of water to drink.

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Do NOT induce vomiting - risk of perforation!

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

Product does not burn, fire-extinguishing activities according to surrounding.

Alcohol-resistant foam

Dry powder

Carbon dioxide

Water spray jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn. No details about unusual fire or explosion hazard.

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

Carbon dioxide (CO₂)

Acidic solutions can release corrosive vapors.

Hydrogen chloride (HCl)

If fluid leaks, Attention slip hazard.

In case of thermal decomposition, the product can evolve dangerous gases.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply (isolated).

Wear full protective clothing.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

Collect contaminated firefighting water separately, must not be discharged into the drains.

Firefighting water reacts acidic.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.

Do not breathe vapors.

Avoid contact with clothing, skin and eyes.

Keep unprotected people away.

Use personal protective clothing.

If fumes or aerosols occur, use suitable respiratory protection.

6.2. Environmental precautions

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

In the case of penetration into waterways or sewers, notify the competent authority.

Suppress gases/vapours/mists with water spray jet

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6.3. Methods and material for containment and cleaning up

Pump off larger quantity.

Use neutralizing agent.

Ensure adequate ventilation.

Send in suitable containers for recovery or disposal.

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

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

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Mixing with alkalis / alkaline products MUST be avoided!

Do not breathe vapors.

Open and handle container with care!

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

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.

Work in rooms with good ventilation.

Keep away from food and drink.

Wash hands before breaks and after work.

Use barrier skin cream.

Advice on protection against fire and explosion

No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Provide acid-resistant floor.

Provide floor with bunding.

Keep only in original container.

Advice on storage compatibility

Do not store with alkalis.

Store and transport separate of food.

Further information on storage conditions

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

Protect from heat and direct solar radiation.

Keep container in a well-ventilated place

Storage group 8B

7.3. Specific end use(s)
No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
112-34-5	2-(2-butoxyethoxy)ethanol	8 hours	67,5	10	
		Short-term	101,2	15	
7664-93-9	Sulphuric acid (mist)	8 hours	0,05		

DNEL-/PNEC-values

DNEL worker

CAS No	Substance name	Value	Code	Remark
7647-01-0	hydrochloric acid, sulfuric acid	15 mg/m3	DNEL acute inhalative (systemic)	
		8 mg/kg	DNEL long-term inhalative (systemic)	
		15 mg/m3	DNEL acute inhalative (local)	

PNEC

CAS No	Substance name	Value	Code	Remark
7647-01-0	hydrochloric acid, sulfuric acid	0,036 mg/l	PNEC aquatic, freshwater	
		0,036 mg/l	PNEC aquatic, marine water	
		0,036 mg/l	PNEC sewage treatment plant (STP)	

8.2. Exposure controls

Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Breathing apparatus in the event of aerosol or mist formation.

Multi-purpose filter ABEK

Not necessary if the ventilation is sufficient.

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" from the company KCL Email: Vertrieb@kcl.de

The selection of the suitable gloves does not only depend on different material, but also on further marks of quality and varies from manufacturer to manufacturer.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

Ensure good interior ventilation, if necessary exhaustion at the workplace.

Oxidising properties

No information available.

Explosive properties

The product is not explosive.

9.2. Other information

see technical data sheet

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactions with light metals, with evolution of hydrogen.

Reactions with alkalies.

10.2. Chemical stability

Stable under recommended storage conditions.

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

May release chlorine when mixed with sodium hypochlorite or other oxidizing substances (e.g., potassium permanganate or hydrogen peroxide)

Can develop hydrogen in aqueous solution with metals.

10.4. Conditions to avoid

Corrosive to metals.

Reactions with alkalies.

10.5. Incompatible materials

Substances to avoid

Reactions with alkalies and metals.

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/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute dermal				Not required because classified as corrosive.
Skin irritation	corrosive			
Eye irritation	corrosive			

	Value/Validation	Species	Method	Remark
Skin sensitization	non-sensitizing			
Sensitization respiratory system	non-sensitizing			
Experiences made from practice Corrosive effect on skin and mucous membrane. If ingested, severe burns of the mouth and throat and to the danger of perforation of esophagus and stomach. Inhalation can cause damage to the respiratory tract or lungs.				
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

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

Harmful effects in the aquatic environment by pH shifts.

Behaviour in sewage plant

The product is an acid. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

General regulation

Product is not allowed to be discharged into the ground water or aquatic environment.

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

Must not be disposed together with household garbage.

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

Disposal in accordance with local regulations.

Recommended cleansing agent

water

General information

The waste code must be allocated in compliance with the EAK-regulation referring to the specific process and the sector.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3264	3264	3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (hydrochloric acid, sulfuric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O. S. (hydrochloric acid, sulfuric acid)	Corrosive liquid, acidic, inorganic, n.o. s. (hydrochloric acid, sulfuric acid)
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	II	II	II
14.5. Environmental hazards	No	No	No

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.

Land and inland navigation transport ADR/RID

Hazard label(s) 8

tunnel restriction code E

Classification code C1

SECTION 15: Regulatory information

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

National regulations

Water hazard class 1 following AwSV (Germany) slightly hazardous for water

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Training advice

See technical datasheet for more information.

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

Each user is responsible for the implementation of the national special regulations.

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 observe the following disclaimer! Our safety data sheets have been compiled according to effective EU directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 1.4

Sources of key data used

Data sheets of the sub-supplier.

Federal Environment Agency (water hazard class)

ECHA (European Chemicals Agency) database of registered substances

Full text of the hazard phrases in section 3.

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.