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

1.1. Product identifier

Name of product Rust- and Stain Remover
Art-Nr 1.0201.01698.00000

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

Recommended intended purpose(s)
cleaning agent

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 3780, 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 30686700
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	
Eye Dam. 1	H318	

Hazard statements for physical hazards

H290 May be corrosive to metals.

Hazard statements for health hazards

H318 Causes serious eye damage.

Additional hints

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

2.2. Label elements

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



GHS05

Signal word
Danger

Hazard statements for physical hazards
H290 May be corrosive to metals.

Hazard statements for health hazards
H318 Causes serious eye damage.

Precautionary Statements

General

P101 If medical advice is needed, have product container or label at hand.
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

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/...
P390 Absorb spillage to prevent material damage.

Disposal

P501 Dispose of contents/container to an approved waste handling.

Hazardous ingredients for labeling

2-ethylhexanol polyglycol ether phosphoric acid ester, sodium salt, hydrochloric acid

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	< 3	Acute Tox. 4, H302 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412
7647-01-0	231-595-7	hydrochloric acid	< 10	Skin Corr. 1A, H314 / STOT SE 3, H335 / Met. Corr. 1, H290 / **

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
111798-26-6		2-ethylhexanol polyglycol ether phosphoric acid ester, sodium salt	< 5	Skin Irrit. 2, H315 / Eye Dam. 1, H318

REACH

CAS No	Name	REACH registration number
112-34-5	2-(2-butoxyethoxy)ethanol	01-2119475104-44-XXXX
7647-01-0	hydrochloric acid	01-2119484862-27-XXXX

Additional advice

** Substance-specific threshold values were taken into account for the classification of the product.

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 (if possible show directions for use or safety data sheet).

In case of inhalation

Ensure of fresh air.
Rinse mouth and nose with water.

In case of skin contact

In case of contact with skin wash off immediately with plenty of water.

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

Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

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

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5.2. Special hazards arising from the substance or mixture

In the case of thermal decomposition formation of dangerous gases possible.
Upon thermal decomposition, formation of irritating gases and vapors possible.
Carbon monoxide (CO)
Carbon dioxide (CO₂)
Hydrogen chloride (HCl)
Acidic solutions may release corrosive fumes.
The product itself does not burn.

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.
Cool containers with water.
Product is non-flammable and does not burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.
Use personal protective clothing.
Avoid contact with clothing, skin and eyes.
Warn persons who are present in the danger zone.
Keep unprotected persons away.
Use suitable breathing apparatus if exposed to vapors / aerosol.
Do not breathe aerosols.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
Suppress gases/vapours/mists with water spray jet

6.3. Methods and material for containment and cleaning up

Pump off larger quantity.
Send in suitable containers for recovery or disposal.
Take up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).
Flush away residues with water.
After taking up the material dispose according to regulation.
Ensure adequate ventilation.

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.

Handle in accordance with good industrial hygiene and safety practice.

Do not inhale vapors.

Keep container tightly closed.

Avoid mixing with alkalis / alkali-containing products ABSOLUTELY!

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.

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.

Advice on storage compatibility

Do not store with alkalies.

Store and transport separate of food.

Further information on storage conditions

Protect from extreme heat and cold.

Keep container in a well-ventilated place

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

Storage group 12

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/m ³]	[ppm]	Remark
112-34-5	2-(2-butoxyethoxy)ethanol	8 hours	67,5	10	
		Short-term	101,2	15	

DNEL-/PNEC-values

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DNEL worker

CAS No	Substance name	Value	Code	Remark
7647-01-0	hydrochloric acid	15 mg/m3	DNEL acute inhalative (local)	

DNEL Consumer

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

PNEC

CAS No	Substance name	Value	Code	Remark
7647-01-0	hydrochloric acid	0,036 mg/l	PNEC aquatic, freshwater	
		0,036 mg/l	PNEC aquatic, marine water	
		0,045 mg/l	PNEC aquatic, intermittent release	
		0,036 mg/l	PNEC sewage treatment plant (STP)	

8.2. Exposure controls

Respiratory protection

If ventilation insufficient, wear respiratory protection.

Multi-purpose filter ABEK

Not necessary with adequate exhaust ventilation.

! 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)

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 ventilation, where necessary use fume hood.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

liquid

Colour

colourless

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 2	20 °C			

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	Value	Temperature	at	Method	Remark
boiling point	> 85 °C				
Melting point / Freezing point	not determined				
Flash point					not applicable
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	23 hPa	20 °C			
Relative density	ca. 1 g/cm ³	20 °C			
Vapour density	not determined				
Solubility in water		20 °C			multimiscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				

Oxidising properties

No information available.

Explosive properties

The product is not explosive.

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 of use.

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Reactions with light metals, with evolution of hydrogen.

Reactions with alkalies.

10.4. Conditions to avoid

Avoid heat and frost.

10.5. Incompatible materials

! Substances to avoid

Alkali (lye)

metal, base

10.6. Hazardous decomposition products

Hydrogen

Hydrogen chloride (HCl)

Concerning possible decomposition products see section 5.

Thermal decomposition

Remark No decomposition if used as directed.

! Additional information

As a general rule we recommend avoiding the contact with strong chemical reagents, such as acids, bases, reductors and oxidizers.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	irritant - risk of strong eye injuries			
Skin sensitization	No known sensitization.			
Sensitization respiratory system	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

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Bioaccumulation not expected.

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 effect in the water possible by shifting of the pH value.

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

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	1789	1789	1789
14.2. UN proper shipping name	HYDROCHLORIC ACID	HYDROCHLORIC ACID	Hydrochloric acid
14.3. Transport hazard class(es)	8	8	8
14.4. Packing group	III	III	III
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 to water

Decree for case of interference/remarks Not subject to the Hazardous Incident Ordinance

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.

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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. Previous version: 1.3

! Sources of key data used

Data sheets of the suppliers.

Full text of the hazard phrases in section 2 and 3.

Federal Environment Agency (water hazard classes)

- 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.