

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

1.1. Product identifier

Name of product Rust Converter
Art-Nr 02.2147.00

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended intended purpose(s)

Rust remover / rust converter

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

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. 1B	H314	

Hazard statements for physical hazards

H290 May be corrosive to metals.

Hazard statements for health hazards

H314 Causes severe skin burns and 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

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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.

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.

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

P405 Store locked up.

P406 Store in corrosive resistant/... container with a resistant inner liner.

Disposal

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

Hazardous ingredients for labeling

phosphoric acid

Additional information

Special rules on packaging

Touchable warning sign (EN/ISO 11683).

Childproof closures (EN/862/ISO 8317).

instructions for use

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]
7664-38-2	231-633-2	phosphoric acid	25 < 50	Skin Corr. 1B, H314 / Metal Corr. 1, H290 / * / **

REACH

CAS No	Name	REACH registration number
7664-38-2	phosphoric acid	01-2119485924-24-XXXX

Additional advice

- ** Substance-specific threshold values were taken into account for the classification of the product.
- * Substance with a Community workplace exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove moisted clothing immediately.
If symptoms occur consult a physician.

In case of inhalation

Ensure of fresh air.

In case of skin contact

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

In case of eye contact

Eye rinsing with water carefully while protecting unhurt eye.
Call for a doctor immediately.

In case of ingestion

Call for a doctor immediately.
Rinse out mouth and give plenty of water to drink.
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.

Foam

Dry powder

Carbon dioxide

Water spray jet

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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:

Phosphorus oxides (e.g. phosphorus pentoxide)

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

Cool endangered containers with water spray jet.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid skin and eye contact.

Use personal protective clothing.

Use breathing apparatus if exposed to vapors / aerosol.

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

Do not breathe vapors.

Ensure adequate ventilation / exhaustion at the workplace.

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

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.

Ensure adequate ventilation.

Use neutralizing agent (basic).

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.

When diluting, always stir product into water.

Handle in accordance with good industrial hygiene and safety practice.

Do not inhale vapors.

Keep container tightly closed.

Observe compliance with workplace exposure limits.

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Avoid mixing with alkalis / alkali-containing products ABSOLUTELY!

General protective measures

Do not inhale gases/vapours/aerosols.

Avoid contact with the eyes.

Hygiene measures

Clean skin thoroughly after working.

Cloths contaminated with product should not be kept in trouser pockets.

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.

Provide acid-resistant floor.

Follow the regulation for water.

Advice on storage compatibility

Store and transport separate of food.

Do not store together with metals.

Store at cool and aired place and at distance to alkalies.

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 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
7664-38-2	phosphoric acid	8 hours	1		
		Short-term	2		

DNEL-/PNEC-values**DNEL worker**

CAS No	Substance name	Value	Code	Remark
7664-38-2	phosphoric acid	2,92 mg/m3	DNEL long-term inhalative (local)	

DNEL Consumer

CAS No	Substance name	Value	Code	Remark
7664-38-2	phosphoric acid	0,73	DNEL long-term inhalative (local)	

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8.2. Exposure controls

Respiratory protection

Short term: filter apparatus, combination filter E-P2
Breathing apparatus in the event of aerosol or mist formation.
Not necessary with adequate exhaust ventilation.

Hand protection

Gloves (acid-resistant)

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.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Chloroprene, 0,65 mm, 480 min. e.g. "Camapren" KCL GmbH, Email: Vertrieb@kcl.de

Eye protection

tightly fitting goggles

Other protection measures

Acid-resistant 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

odourless

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	< 1	20 °C			
starts to boil	> 100 °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				

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	Value	Temperature	at	Method	Remark
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	1,25 g/cm ³				
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

No information available.

10.3. Possibility of hazardous reactions

Reactions with base metals, with evolution of hydrogen.

Reactions with reducing agents.

Reactions with alkalies and metals.

10.4. Conditions to avoid

Avoid heat and frost.

Rust Converter**10.5. Incompatible materials****Substances to avoid**

Alkali (lye)
Ammonia
Reducing agent
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 oral	2600 mg/kg	rat		
LD50 acute dermal				Not required since classified as skin corrosive.
Skin irritation	corrosive			
Eye irritation	corrosive			
Skin sensitization	No known sensitization.			

Experiences made from practice

May cause respiratory irritation.

Causes corrosions.

If swallowed: Severe burns of the mouth and throat and to the danger of perforation of the esophagus and stomach.

Additional information

Further hazardous properties can not be excluded.

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

	Value	Species	Method	Validation
Daphnia	EC50 > 100 mg/l (48 h)	Daphnia magna		Data refer to phosphoric acid.
Algae	EC50 > 100 mg/l (72 h)	Desmodesmus subspicatus		Data refer to phosphoric acid.

12.2. Persistence and degradability

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	Elimination rate	Method of analysis	Method	Validation
Biological degradability				The methods for determining biodegradability are not applicable to inorganic substances.
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 effect in the water possible by shifting of the pH value. Can contribute to the eutrophication of water bodies.
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				Do not allow uncontrolled leakage of product into the environment. Do not allow undiluted or unneutralized product to reach sewage water or drainage.

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. Do not let the undiluted or unneutralized product enter the sewage system.

Recommendations for packaging

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	1805	1805	1805
14.2. UN proper shipping name	PHOSPHORIC ACID SOLUTION	PHOSPHORIC ACID SOLUTION	Phosphoric acid, solution

	ADR/RID	IMDG	IATA-DGR
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 VwVwS
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.

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: 1.0

Sources of key data used

Data sheets of the suppliers.

Federal Environment Agency (water hazard classes)

Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

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