

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

1.1. Product identifier

Name of product Pura Tank
Art-Nr: 1.0102.00005.00000

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

cleaning agent
Water tank 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 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
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
Eye Irrit. 2	H319	

Hazard statements for health hazards

H319 Causes serious eye irritation.

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]



GHS07

Signal word

Warning

Hazard statements for health hazards

H319 Causes serious eye irritation.

Precautionary Statements

General

P102 Keep out of reach of children.

Prevention

P262 Do not get in eyes, on skin, or on clothing.

Response

P302 + P352 IF ON SKIN: Gently wash with plenty of soap and water.

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

P337 + P313 If eye irritation persists: Get medical advice/attention.

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]
5949-29-1	201-069-1	citric acid monohydrate	> 10	Eye Irrit. 2, H319
68439-50-9		Alcohols, C12-14, ethoxylated, 7-14 EO	< 1	Eye Dam. 1, H318 / Acute Tox. 4, H302 / Aquatic Chronic 3, H412
7664-38-2	231-633-2	phosphoric acid	< 5	Skin Corr. 1B, H314 / Metal Corr. 1, H290 / * / **

REACH

CAS No	Name	REACH registration number
5949-29-1	citric acid monohydrate	01-2119457026-42-XXXX
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.

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

less than 5 % non-ionic surfactants

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

In case of contact with eyes rinse thoroughly with water.
Remove contact lenses.
In case of irritation consult an ophthalmologist.

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 fire-extinguishing substance
Carbon dioxide
Water spray jet

5.2. Special hazards arising from the substance or mixture

In the case of thermal decomposition formation of dangerous gases possible.
Carbon monoxide (CO)
Phosphorus oxides (e.g. phosphorus pentoxide)
Carbon dioxide (CO₂)
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 protective clothing.

Additional information

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.
Avoid skin and eye contact.
Use personal protective clothing.

6.2. Environmental precautions

In the case of contamination of soil, waterways or drains, inform the competent authorities.
Do not discharge into the drains/surface waters/groundwater.
Dilute with plenty of water.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, general-purpose binder, kieselguhr).
Flush away residues with water.
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.
Avoid contact with skin and eyes.
Take the usual precautions when handling with chemicals.

General protective measures

Avoid contact with eyes and skin

Hygiene measures

Clean skin thoroughly after working.
At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions

Protect from direct solar radiation.
Protect from extreme heat and cold.
Keep container dry, tightly closed and store at cool and aired 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, 2004/37/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)	

PNEC

CAS No	Substance name	Value	Code	Remark
5949-29-1	citric acid monohydrate	33,1 mg/kg dw	PNEC sewage treatment plant (STP)	
		440 mg/l	PNEC aquatic, freshwater	
		3,46 mg/kg	PNEC sediment, marine water	
		34,6 mg/kg	PNEC sediment, freshwater	

8.2. Exposure controls

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.

Breathing apparatus with combination filter A2/P2

Hand protection

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: Nitrile, 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

safety goggles

Other protection measures

Light 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

almost odourless

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	ca. 1 - 2	20 °C			Was measured undiluted. The product has no acidic reserve / buffer capacity and is easily neutralized.
Boiling temperature / boiling range	not determined				
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	not determined				
Relative density	not determined				
Vapour density	not determined				
Solubility in water		20 °C			multimiscible
Solubility/other	not determined				

Pura Tank

	Value	Temperature	at	Method	Remark
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					
No information available.					

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

Reacts with strong oxidants.

Reactions with alkalies.

10.4. Conditions to avoid

frost

Avoid heat and direct sunlight.

10.5. Incompatible materials**Substances to avoid**

Alkali (lye)

Oxidising agent, strong

10.6. Hazardous decomposition products

Carbon monoxide

Carbon dioxide

Phosphorus oxides (e.g. P₂O₅)**Thermal decomposition**

Remark	No decomposition if used as directed.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	> 5400 mg/kg	mouse	OECD 401	Information concerns to main component.
LD50 acute dermal	> 2000 mg/kg	rat		Information refers to main component.
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	irritant			
Skin sensitization	No sensitizing effects known.			
Sensitization respiratory system	No known sensitization.			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No evidence of genotoxicity.
Reproduction-Toxicity				No evidence of reproductive toxicity.
Carcinogenicity				No evidence of possible carcinogenic effects.

Specific target organ toxicity (single exposure)

No effect known.

Specific target organ toxicity (repeated exposure)

No effect known.

Aspiration hazard

No classification in terms of aspiration.

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

Pura Tank

	Value	Species	Method	Validation
Fish	LC50 > 440 mg/l (48 h)	Leuciscus idus	OECD 203	Information refers to main component.
Daphnia	EC50 1535 mg/l (24 h)	Daphnia magna	OECD 202	Information refers to main component.
Algae	EC50 > 425 mg/l (168 h)	Scenedesmus quadricauda		Information refers to main component.

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability				Biodegradable

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**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.

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	-	-	-
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	following AwSV (Germany) slightly hazardous to water
Decree for case of interference/remarks	Accident decree, addendum II: not named.	

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Training advice

See the technical data sheet for more information.

CAS - Chemical Abstracts Service; CLP - classification, labeling and packaging; DNEL - derived exposure level without adverse effects; GHS - Globally Harmonized System for Classification and Labeling of Chemicals; LC50 - Median Lethal Concentration;
OECD - Organization for Economic Co-operation and Development; PBT - Persistent, Bioaccumulative and Toxic; PNEC - Estimated No Effect Concentration; STOT - Specific Target Organ Toxicity; SVHC - substance of very high concern;

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: 2.0

Sources of key data used

Data sheets of the suppliers.

European Chemicals Agency (ECHA)

Full text of Hazard Statements in Section 3 (NOT classification of the mixture).

Federal Environment Agency (water hazard classes)

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