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

1.1. Product identifier

Name of product Puryclean
Art-Nr 06.1033.00
Name of substance citric acid monohydrate
EC No 201-069-1
REACH registration number 01-2119457026-42-XXXX
CAS No 5949-29-1

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
Hans-Böckler-Ring 33, 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)30 192 40

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

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

! Prevention

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

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 5949-29-1 citric acid monohydrate
EC No 201-069-1
REACH registration number 01-2119457026-42-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 case of inhalation

Ensure of fresh air.
In the event of symptoms refer for medical treatment.

In case of skin contact

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

Puryclean

In case of ingestion

Rinse out mouth thoroughly with water.

In the event of symptoms refer for medical treatment.

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.

Dry fire-extinguishing substance

Carbon dioxide

Water spray jet

Unsuitable extinguishing media

Full water 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)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply (isolated).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid skin and eye contact.

Avoid dust formation.

Use personal protective clothing.

Do not breathe dust.

6.2. Environmental precautions

No information available.

6.3. Methods and material for containment and cleaning up

Send in suitable containers for recovery or disposal.

Flush away residues with water.

After taking up the material dispose according to regulation.

Take up mechanically.

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 the formation and deposition of dust.

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.

General protective measures

Avoid contact with the eyes.

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

Requirements for storage rooms and vessels

Keep in closed original container.

Provide acid-resistant floor.

Advice on storage compatibility

Do not store with alkalis.

Do not store together with oxidizing agents.

Further information on storage conditions

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

Storage group 13

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Respiratory protection

In case of dust formation wear micro dust mask.

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

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**

solid

Colour

white

Odour

odourless

Odour threshold

No information available.

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	1,8	20 °C	50 g/l		
Boiling temperature / boiling range	No information available.				
decomposition point	> 170 °C				
Flash point	not applicable				
Vapourisation rate	No information available.				
Flammable (solid)	The product is not flammable.				
Flammability (gas)	No information available.				
Ignition temperature	No information available.				
Self ignition temperature	The product is not self-igniting.				
Lower explosion limit	No information available.				
Upper explosion limit	No information available.				
Vapour pressure	No information available.				
Relative density	1,54 g/cm ³	20 °C			
Bulk density	550-950 kg/m ³				
Vapour density	No information available.				
Solubility in water	676 g/l	25 °C			soluble
Solubility/other	No information available.				

Puryclean

	Value	Temperature	at	Method	Remark
Partition coefficient n-octanol/water (log P O/W)	No information available.				
Decomposition temperature	No information available.				
Viscosity	No information available.				
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

No information available.

10.3. Possibility of hazardous reactions

Reactions with strong oxidising agents.

Reactions with alkalies.

10.4. Conditions to avoid

heat

10.5. Incompatible materials

Materials to avoid

Alkali (lye)

Oxidising agent

10.6. Hazardous decomposition products

Carbon monoxide

Carbon dioxide

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	5400 mg/kg	mouse		
LD50 acute dermal	> 2000 mg/kg	rat		
LC50 acute inhalation				not determined
Irritability skin	low irritant effect - not necessary to label			
Irritability eye	irritant			
Skin sensitization	No known sensitization.			
Sensitization respiratory system	No known sensitization.			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vitro available.

Additional information

Further hazardous properties can not be excluded.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 440 mg/l (48 h)	Golden orfe	OECD 203	
Daphnia	1535 mg/l (24 h)	Daphnia magna		
Algae	425 mg/l (168 h)	Scenedesmus quadricauda		
Bacteria	> 10000 mg/l (16 h)	Pseudomonas putida		

12.2. Persistence and degradability

Biological degradability	98 % (2 d)			readily degradable
---------------------------------	------------	--	--	--------------------

Puryclean

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

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

Additional ecological information

	Value	Method	Remark
BOD	526 mg/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

Uncontaminated packaging may be taken for recycling.
Uncontaminated 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 following VwVwS
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. Previous version: 1.3

Sources of key data used

Data sheets of the suppliers.