

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 11 Nov 2022

Print date: 11 Nov 2022

Version: 7



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Citric Acid

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

1.1. Product identifier

Trade name/designation:

Citric Acid

CAS No.:

5949-29-1

Index No.:

607-750-00-3

REACH No.:

01-2119457026-42

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

Use of the substance/mixture:

Product for Winetreatment.

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Eaton Technologies GmbH

Langenlonsheim Branch

An den Nahewiesen 24

55450 Langenlonsheim

Germany

Telephone: +49 6704 204-0 (Diese Nummer ist nur zu Bürozeiten besetzt.)

Telefax: +49 6704 204-121

E-mail: SDB@Eaton.com

Website: www.eaton.com/filtration

Notfallauskunft bei Vergiftungen: Giftinformationszentrum Mainz (Deutsch und Englisch).

Emergency medical information: Poison information center Mainz (German and English).

1.4. Emergency telephone number

24h: +49 6131 19240

Notfallauskunft bei Vergiftungen: Giftinformationszentrum Mainz (Deutsch und Englisch).

Emergency medical information: Poison information center Mainz (German and English)., 24h: +49 6131 19240

SECTION 2: Hazards identification

* 2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
STOT-single exposure (STOT SE 3)	H335: May cause respiratory irritation.	

* 2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark

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Signal word: Warning

Hazard statements for health hazards

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements Prevention

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response

P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.

Precautionary statements Storage

P405	Store locked up.
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2.3. Other hazards

Adverse physicochemical effects:

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

SECTION 3: Composition/information on ingredients

3.1. Substances

Description:

2-hydroxy-1,2,3-propantricarbonsäure, Citric Acid

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 5949-29-1 REACH No.: 01-2119457026-42	ZITRONENSÄURE, WASSERHALTIG The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	100 %

SECTION 4: First aid measures

4.1. Description of first aid measures

Following inhalation:

Provide fresh air.
In case of respiratory tract irritation, consult a physician.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
IF ON CLOTHING: Change contaminated, saturated clothing.

After eye contact:

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion:

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

* 4.2. Most important symptoms and effects, both acute and delayed

Symptoms: irritant.
Response: Irritating to eyes. Irritation to respiratory tract

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water, Carbon dioxide (CO₂), Water mist. Foam, Extinguishing powder
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Pyrolysis products, toxic
In case of fire and/or explosion do not breathe fumes.
The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

5.4. Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Wear personal protection equipment. Provide adequate ventilation as well as local exhaust at critical locations.
Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes.
Keep unprotected people away and stay on the upwind side.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into soil/subsoil.
Knock down dust with water spray jet.
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Take up mechanically. Avoid dust formation.
Wash with plenty of water.
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

No data available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Avoid dust formation. Provide adequate ventilation as well as local exhaust at critical locations. Avoid contact with skin, eyes and clothes.

Fire prevent measures:

Take precautionary measures against static discharges. Explosive dust-air mixtures may form.
Keep away from sources of ignition - No smoking.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Advices on general occupational hygiene

Wash hands before breaks and after work.

When using do not eat, drink, smoke, sniff.

Remove contaminated, saturated clothing. Wash contaminated clothing prior to re-use.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Suitable floor material: Acid-resistant

Packaging materials:

Keep/Store only in original container.

Requirements for storage rooms and vessels:

Keep container tightly closed in a cool, well-ventilated place.

Keep container dry. Protect from moisture.

Hints on storage assembly:

Do not store together with: Alkali (lye), Oxidising agent, Solvent

Storage class (TRGS 510, Germany): 11 - Combustible solids that cannot be assigned to any of the above storage classes

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

To follow:

limiting value of inert dust (alveolar content) : 3 mg/m³ TRGS 900

limiting value of inert dust (breathable content): 10 mg/m³

8.2.2. Personal protection equipment

Eye/face protection:

Tightly sealed safety glasses.

Skin protection:

Avoid contact with eyes and skin.

Protect skin by using skin protective cream.

Suitable material: The glove material has to be impermeable and resistant to the product/the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Breakthrough time:: The exact break through time has to be found out by the manufacturer of the protective gloves nad has to be observed.

NBR (Nitrile rubber): > 0,11 mm

Breakthrough time: > 480 min.

Respiratory protection:

Respiratory protection necessary at: Generation/formation of dust

Suitable respiratory protection apparatus: short-term: Filtering device (EN 147) P 1

Other protection measures:

Protective clothing: Take off immediately all contaminated clothing.

General health and safety measures: Keep away from food, drink and animal feedingstuffs. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

8.2.3. Environmental exposure controls

No data available

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SECTION 9: Physical and chemical properties

* 9.1. Information on basic physical and chemical properties

Appearance

Physical state: crystalline

Colour: transparent; whitish

Odour: odourless

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	1.8	25 °C	② Gehalt an gelöster Substanz: 5 %
Melting point	≈ 135 - 152 °C		
Freezing point	not determined		
Initial boiling point and boiling range	not determined		
Decomposition temperature	≈ 153 °C		
Flash point	not determined		
Evaporation rate	not determined		
Auto-ignition temperature	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	not determined		
Vapour density	not determined		
Density	1.54 - 1.67 g/mL	20 °C	
Relative density	not determined		
Bulk density	850 - 950 kg/m ³		
Water solubility	≈ 1,330 g/L	20 °C	
Partition coefficient: n-octanol/water	-1.72		
Dynamic viscosity	not determined		
Kinematic viscosity	not determined		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reacts with : Alkali (lye) , Oxidising agent, strong; Reducing agent

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.4. Conditions to avoid

Keep away from heat.

Protect from moisture.

Remove all sources of ignition.

10.5. Incompatible materials

Response: Oxidising agent, Reducing agent Base

10.6. Hazardous decomposition products

not known.

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SECTION 11: Toxicological information

* 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

LD₅₀: Mouse: 5.400 mg/kg

Acute dermal toxicity:

LD₅₀: Rat: > 2.000 mg/kg

Skin corrosion/irritation:

slightly irritant but not relevant for classification.

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Causes serious eye damage.:

Rabbit: Irritant

Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

May cause respiratory irritation.

inhalative , irritant.

STOT-repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:

Acute fish toxicity:

Leuciscus idus (golden orfe) LC₅₀: 96 h: 440-760 mg/l, OECD 203

Acute Daphnia toxicity:

Daphnia magna LC₅₀: 24h: 1535 mg/l

Daphnia magna EC₅₀: 72 h: 120 mg/l

Effects in sewage plants:

Product is acid. Before discharge into sewage plants the product normally needs to be neutralised.

Additional ecotoxicological information:

Do not allow to enter into surface water or drains.

12.2. Persistence and degradability

Additional information:

Further ecological information: According to the present state of knowledge negative ecological effects are not expected. Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water:

-1.72

Accumulation / Evaluation:

No indication of bioaccumulation potential.

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12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The disposal of the product has to be carried out in accordance with the legal requirements. EWC waste codes are strictly industry-oriented, therefore waste classification has to be done by the waste producer.

Waste treatment options

Appropriate disposal / Package:

Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

15.1.1. EU legislation

No data available

15.1.2. National regulations

[DE] National regulations

Restrictions of occupation

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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Störfallverordnung (12. BImSchV)

Remark:

Unterliegt nicht der StörfallIV.

Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

Ziffer 1:

5.2.1

Water hazard class

WGK:

1 - schwach wassergefährdend

Other regulations, restrictions and prohibition regulations

For this substance a chemical safety assessment has been carried out.

15.2. Chemical Safety Assessment

No data available

SECTION 16: Other information

16.1. Indication of changes

2.1.	Classification of the substance or mixture
2.2.	Label elements
4.2.	Most important symptoms and effects, both acute and delayed
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
STOT-single exposure (STOT SE 3)	H335: May cause respiratory irritation.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

No data available

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

* Data changed compared with the previous version.