

Citric Acid

Revision date: 06.12.2010 / 09.10.2012 Version: 2 Date of print: 08.10.2013



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

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

1.1. Product identifiers

Citric Acid

REACH registration No.: 02-2119773813-30-xxxx

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

Use of the substance/ preparation: Product for Winetreatment.

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/
downstream user/distributor): Eaton Technologies GmbH

Begerow Product Line
An den Nahewiesen 24
55450 Langenlonsheim

Telephone: +49 6704 204-0

Telefax: +49 6704 204-121

E-mail (competent person): SDB@Eaton.com

Dept. responsible for information: Produktmanagement
Only available during office hours.

Information telephone: +49 6704 204-0

1.4. Emergency telephone number

Dept. responsible for information: Emergency medical information: Giftinformationszentrum Mainz
(German and English).

Emergency telephone: +49 (6131) 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP):

Causes serious eye irritation.

Classification according to Directive 67/548/EEC or 1999/45/EC:

Irritating to eyes.

2.2. Label elements

Labelling (67/548/EEC or 1999/45/EC):

Hazard symbol(s) and hazard identifier(s) for dangerous materials and preparations:

Xi



R phrases:

R phrases	
R36	Irritating to eyes.

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S-phrases:

S-phrases	
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Labelling (CLP)

Hazard pictograms: GHS07



Signal word: Warning

Hazard statements:

Hazard statements:	
H319	Causes serious eye irritation.

Safety precautions:

Safety precautions:	
P264.1	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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**Possible harmful physico-chemical 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**Chemical characterization (preparation):**

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

3.1. Substances**3.2. Mixtures****Hazardous ingredients:**

CAS No.	EC No	Chemical name:/ REACH registration No.	of (%)	up to (%)	Unit/ Content	Hazard symbol(s)	R phrases	INDEX no.
5949-29-1		Citronensäure-Monohydrat 02-2119773813-30-0000		100	%	Xi	36	

Full text of R-phrases: see section 16.

Labelling (CLP):

CAS No.	EC No	Chemical name:/ REACH registration No.	Hazard pictograms	Signal word	Hazard statements
5949-29-1		Citronensäure-Monohydrat 02-2119773813-30-0000	GHS07	Warning	319

Full text of H-phrases: see section 16.

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SECTION 4: First aid measures

4.1. Description of first aid measures

After 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.

Change contaminated, saturated clothing.

In case of 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.

After ingestion:

Rinse mouth immediately and drink plenty of water. 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.

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

Information to physician:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water. Carbon dioxide (CO₂). Water mist. Foam. Extinguishing powder.

Extinguishing media which must not be used for safety reasons:

High power water jet.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:

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.

5.3. Advice for firefighters

Special protective equipment for firefighters:

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

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:

Provide for sufficient ventilation and punctiform suction at critical points.

Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.1.2. For emergency responders

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.

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6.3. Methods and material for containment and cleaning up**Methods for cleaning up:**

Take up mechanically.

Wash with plenty of water.

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling**Advices on safe handling:**

Avoid generation of dust. Provide for sufficient ventilation and punctiform suction at critical points. Avoid contact with skin, eyes and clothes.

Precautions against fire and explosion:

Avoid generation of dust. Explosive dust-air mixtures may form.

Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storerooms and containers:**

Keep container tightly closed in a cool, well-ventilated place. Keep only in the original container. Keep container dry. Protect from moisture.

Storage temperature: 10-25 °C

Hints on joint storage:

Do not store together with: Alkalis (alkalis). Oxidizing agents, Solvents

Further information on storage conditions:

Suitable floor material: Acid-resistant.

Storage class: 11**7.3. Specific end use(s)**

SECTION 8: Exposure controls/personal protection

8.1. Control parameters**8.2. Exposure controls****8.2.1. Appropriate engineering controls****Technical measures:**

Provide for sufficient ventilation and punctiform suction at critical points.

To follow: Occupational exposure limit values:

8.2.2. Personal protective equipment**Respiratory protection:** Respiratory protection necessary at/for: Generation/formation of dust high concentrations

Suitable respiratory protection apparatus: Filtering device (DIN EN 147). P 1

Suitable material: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Wearing time with permanent contact: Butyl caoutchouc (butyl rubber).

Penetration time (maximum wearing period): > 120 min**Eye protection:** Tightly sealed safety glasses.**Body protection:** Take off immediately all contaminated clothing.

Avoid contact with skin and eyes.

Protect skin by using skin protective cream.

General protection and hygiene measures:

Keep away from food, drink and animal feeding stuffs. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

8.2.3. Environmental exposure controls:

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SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: crystalline
Colour: transparent; whitish
Odour: odourless

Important health, safety and environmental information:

		Unit		Method
pH:	1,8		at °C 25	5 %
Melting point / melting range:	153	°C		
Flash point (°C):	345	°C		
Oxidizing characteristics:	<i>Not oxidising.</i>			
Density:	1,665	g/ml	at °C 20	
Bulk density:	850 - 950	kg/m ³		

9.2. Other information**SECTION 10: Stability and reactivity****10.1. Reactivity**

This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.

10.2. Chemical stability

Substance is, under normal conditions, chemically stable.

10.3. Possibility of hazardous reactions

Danger of dust explosion.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Response: Oxidising agent. Reducing agent. Base.
Corrosive to metals.

10.6. Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity:**

CAS No.	Chemical name	LD50: oral	Unit	Species	LD50: dermal	Unit	Species	LC50: inhalat iv	Unit	Species
5949-29-1	Citronensäure-Monohydrat	5400	mg/kg	Mouse.	>2000	mg/kg	Rat.			

CAS No.	Chemical name	Method: oral	Method: dermal	Method: inhalativ	h	Remark
5949-29-1	Citronensäure-Monohydrat					Data apply to the technically active substance.

Irritant and corrosive effects:

Rabbit.
Irritant effect on the skin: mild irritant.
Irritant effect on the eye: irritant.

Sensitisation:

not determined

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Repeated dose toxicity:

not determined

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

not determined

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.

Further details:

Do not allow to enter into surface water or drains.

12.2. Persistence and degradability**Method:**

According to the present state of knowledge negative ecological effects are not expected.

Further details:

Readily biodegradable (according to OECD criteria)

12.3. Bioaccumulative potential**12.4. Mobility in soil****12.5. Results of PBT and vPvB assessment**

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

12.6. Other adverse effects**Biochemical oxygen demand (BOD):** 526 mg/g

SECTION 13: Disposal considerations

13.1. Waste treatment methods**Recommendation:**

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.

Contaminated packaging:**Recommendation:**

Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1. Land transport (ADR/RID)**14.2. Inland waterway craft (ADN/ADNR)****14.3. Sea transport (IMDG)****14.4. Air transport (ICAO-TI / IATA-DGR)****14.5. Additional information:**

No dangerous good in sense of these transport regulations.

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SECTION 15: Regulatory information

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

Störfallverordnung:

Unterliegt nicht der StörfallV.

Water Hazard Class: 1 **Source:** Anh. 2, Nr.

Other regulations (EU):

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

15.2. Chemical Safety Assessment

SECTION 16: Other information

Further remarks:

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.

E-mail (competent person):

SDB@Eaton.com

Relevant R-and H-phrases (Number and full text):

R phrases	
R36	Irritating to eyes.

Hazard statements	
H319	Causes serious eye irritation.