

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.01.2013

Version number 7

Revision: 07.01.2013

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

- **Date of compilation:** 14.07.2004
- **1.1 Product identifier**
 - **Trade name:** Citric Acid
 - **Synonym(s):**
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate
Zitronensäure monohydrat
 - **CAS Number:**
5949-29-1
 - **EC number:**
201-069-1
 - **Registration number:** REACH: 01-2119457026-42
 - **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
 - **Application of the substance / the preparation:** Chemicals for various applications
 - **1.3 Details of the supplier of the safety data sheet**
Manufacturer / Supplier:
Kreidezeit Naturfarben GmbH
Kassemuehle 3
D - 31196 Sehlem
Germany
 - **phone:** +49-(0)5060-6080650
fax: +49-(0)5060-6080680

E-mail address of the competent person responsible for the Safety Data Sheet: info@kreidezeit.de

- **Informing department:**
Quality management department
laboratory, phone: +49-(0)5060-6080650
- **1.4 Emergency telephone number:**
Kreidezeit Naturfarben GmbH
phone: +49-(0)5060-6080650
(only during opening times)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.01.2013


Version number 7

Revision: 07.01.2013

Trade name: Citric acid, monohydrate

(Contd. of page 1)

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

 Xi; Irritant

R36: Irritating to eyes.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS07

· Signal word Warning

· Hazard statements

H319 Causes serious eye irritation.

· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

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

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterization: Substances

· CAS No. Designation:

5949-29-1 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

· Identification number(s):

· EC number: 201-069-1

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information: No special measures required.

· After inhalation: Supply fresh air; consult doctor in case of symptoms.

· After skin contact: Rinse with plenty of water.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult doctor.

Remove contact lenses, if present and easy to do.

· After swallowing:

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms consult doctor.

· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents Product does not burn - take extinguishing measures according to fire conditions.

(Contd. on page 3)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.01.2013

Version number 7

Revision: 07.01.2013

Trade name: Citric acid, monohydrate

(Contd. of page 2)

- For safety reasons unsuitable extinguishing agents void
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire:
Carbon monoxide (CO) and Carbon dioxide (CO₂)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Avoid causing dust.
Do not breathe dust.
Avoid contact with eyes.
Keep people at a distance and stay on the windward side.
- **6.2 Environmental precautions:**
Damp down dust with water spray jet.
Do not allow to enter drainage system, surface or ground water.
Do not allow large quantities of product to reach sewage system or water bodies.
Inform respective authorities in case of a large amount of product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Collect mechanically.
Send for recovery or disposal in suitable containers.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Any deposit of dust which cannot be avoided must be removed regularly.
Do not breathe dust.
Make sure that all applicable workplace limits are observed.
Avoid prolonged or repeated skin contact.
Avoid contact with eyes.
- **Information about protection against explosions and fires:** Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:** Observe all workplace limits for dust.
- **DNELs** no data available
- **PNECs** no data available

(Contd. on page 4)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.01.2013

Version number 7

Revision: 07.01.2013

Trade name: Citric acid, monohydrate

(Contd. of page 3)

- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any contaminated garments.
Do not eat, drink or smoke while working.
Do not breathe dust.
Avoid contact with the eyes.
Avoid close or long term contact with the skin.
Wash hands during breaks and at the end of the work.
Use skin protection cream for preventive skin protection.
- **Breathing equipment:** Use breathing protection in case of dust formation.
- **Protection of hands:**
Protective gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Check the permeability prior to each renewed use of the glove.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
To avoid skin problems reduce the wearing of gloves to the required minimum.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- **Material of gloves**
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.
- **Penetration time of glove material** Protective gloves should be replaced at first signs of wear.
- **Eye protection:** Tightly sealed safety glasses
- **Body protection:**
Light weight protective clothing
Body protection must be chosen depending on activity and possible exposure.
- **Limitation and supervision of exposure into the environment**
Do not allow to enter drainage system, surface or ground water.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Powder
Colour:	white
Smell:	odourless
Odour threshold:	not applicable
- **pH-value (50 g/l) at 20 °C:** ~1.8
- **Change in condition**

Melting point/Melting range:	not determined
Boiling point/Boiling range:	not determined
- **Flash point:** 345 °C
- **Inflammability (solid, gaseous)** Product is not inflammable.
- **Ignition temperature:** no data available
- **Decomposition temperature:** not determined
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** not determined

(Contd. on page 5)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.01.2013

Version number 7

Revision: 07.01.2013

Trade name: Citric acid, monohydrate

(Contd. of page 4)

· Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
· Oxidizing properties	not classified as oxidising
· Vapor pressure:	no data available
· Density at 20 °C:	1.54 g/cm ³
· Bulk density:	900 kg/m ³
· Relative density	no data available
· Vapour density (AIR = 1):	no data available
· Evaporation rate	no data available
· Solubility in / Miscibility with	
Water at 20 °C:	1600 g/l
· Organic solvents:	not determined
· Partition coefficient (n-octanol/water): not determined	
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity see 10.3
- 10.2 Chemical stability
- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions**
Strong exothermic reaction with alkalis.
Forms hydrogen in aqueous solution with metals
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Strong oxidizing agents
Alkaline materials
Metals
Reducing agents
- **10.6 Hazardous decomposition products:** Carbon monoxide (CO) and Carbon dioxide (CO₂)

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
 - **Acute toxicity:**
- | | |
|---|--------------------|
| · LD/LC50 values that are relevant for classification: | |
| Oral LD50 | > 3000 mg/kg (rat) |
- **Primary irritant effect:**
 - **on the skin:** Slightly irritating
 - **on the eye:** Causes serious eye irritation.
 - **Sensitization:** No sensitizing effect known.
 - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
According to present knowledge no CMR-effects known.

GB

(Contd. on page 6)

Safety data sheet
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Version number 7

Revision: 07.01.2013

Trade name: Citric acid, monohydrate

(Contd. of page 5)

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Easily biodegradable
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **Chemical Oxygen Demand (COD-value):** not determined
- **Biochemical Oxygen Demand (BOD5-value):** not determined
- **General notes:**
- There are no quantitative data on the ecological effects of this product available to us.
- Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- Water hazard class 1 (Assessment by list): slightly hazardous for water
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Waste disposal key number:** According to local/national regulations.
- **European waste catalogue:** Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water

SECTION 14: Transport information

- | | |
|---|--|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | Not applicable. |
| · Marine pollutant: | NO |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN "Model Regulation": | - |

GB

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

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Version number 7

Revision: 07.01.2013

Trade name: Citric acid, monohydrate

(Contd. of page 6)

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Decree to be applied in case of technical fault:** Directive 96/82/EC does not apply.
- **Water hazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Reasons for changes:**
The Material Safety Data Sheet has been revised. Changes in the respective chapters are characterized in the left side edge by *.
- **Department issuing MSDS:**

- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
- **Sources:** These data are based on information submitted by pre-suppliers.
- * **Data compared to the previous version altered.**