

Trade name: Acid citricum monohyd fine Granular

Substance number: 060165

Version: 3 / CH

Date revised: 16.10.2023

Replaces Version: 2 / CH

Print date: 16.10.23

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

1.1. Product identifier

Acid citricum monohyd fine Granular
Item No. 06016500

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG
Industriestrasse 35
9100 Herisau
Telephone no. 0041 (0)71 353 58 58
E-mail address of person responsible for this SDS sdb@haenseler.ch

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)
Eye Irrit. 2 H319
STOT SE 3 H335

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms ***



Signal word ***

Warning

Hazard statements ***

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

Precautionary statements ***

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

Trade name: Acid citricum monohyd fine Granular

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P501.3 Disposal in compliance with local and national regulations.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains *** Citric acid, monohydrate

2.3. Other hazards

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients *****Chemical characterization**

Citric Acid Monohydrate, Fine Granular

Molecular weight

Value 210.14 g/mol

Hazardous ingredients *****Citric acid, monohydrate**

CAS No. 5949-29-1

EINECS no. 201-069-1, 611-842-9

Registration no. 01-2119457026-42-0008

Concentration \geq 50 %

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319

STOT SE 3 H335

Respiratory tract; Route of exposure: inhalative

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Never give anything by mouth to an unconscious person. In all cases of doubt, or when symptoms persist, seek medical attention. Adhere to personal protective measures when giving first aid

After inhalation

Remove to fresh air, keep patient warm and at rest. If necessary, device ventilation or oxygen supply. In the event of symptoms take medical treatment. When dust is intensively inhaled, seek medical help immediately.

After skin contact

Remove contaminated clothing. Wash off immediately with soap and water and rinse well. Consult a doctor if symptoms occur.

After eye contact

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution. Remove contact lenses. Take medical treatment.

After ingestion

Rinse mouth thoroughly with water. Drink water in small gulps. Never give anything by mouth to an unconscious person. If individual is drowsy or unconscious place in recovery position (on left side, with head down). Take medical treatment.

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

Irritating to respiratory system. Coughing, Causes very strong irritations of the eyes, skin and mucous membranes. if swallowed: Diarrhoea, Nausea, Vomiting

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

Trade name: Acid citricum monohyd fine Granular

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Version: 3 / CH

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Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Foam

Non suitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

The product is not combustible. Forms explosive mixture with air are possible. In case of combustion evolution of dangerous gases possible. Carbon monoxide (CO); Carbon dioxide (CO₂)

5.3. Advice for firefighters**Special protective equipment for fire-fighting**

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

Other information

Fire residues and contaminated fire-fighting 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**

Keep away unprotected persons. Ensure supply of fresh air. Wear protective equipment. Do not inhale dust. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. In case the product spills into sewage waters, immediately inform the authorities.

6.3. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

SECTION 7: Handling and storage *****7.1. Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation. Wear protective equipment. For personal protection see Section 8. Isolate from sources of heat, sparks and open flame. Smoking, eating and drinking should be prohibited in application area. Use antistatic tools. Use explosion-proof apparatus and fittings.

Advice on protection against fire and explosion

Use explosion-proof equipment/fittings and non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities**Recommended storage temperature**

Value	10	30	°C
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Requirements for storage rooms and vessels

Keep tightly closed in a dry and cool place. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Trade name: Acid citricum monohyd fine Granular

Substance number: 060165

Version: 3 / CH

Date revised: 16.10.2023

Replaces Version: 2 / CH

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Storage classes

Storage class according to TRGS 510	13	Non- combustible solids
Storage category (Switzerland)	11/13	Other solid hazardous substances with classification/labelling hazardous

Further information on storage conditions

Keep only in the original container in a cool, well ventilated place.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Predicted No Effect Concentration (PNEC)****Citric acid, monohydrate**

Type of value	PNEC	
Type	Freshwater	
Concentration	0.44	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0.044	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	1000	mg/l
Type	Freshwater sediment	
Concentration	34.6	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	3.46	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	33.1	mg/kg

8.2. Exposure controls**Exposure controls**

Provide adequate ventilation. See Section 7. No measures exceeding the ones mentioned necessary.

General protective and hygiene measures

General industrial hygiene practice. Wash hands before breaks and after work. At work do not eat, drink, smoke or take drugs. Keep away from food-stuffs, beverages and feed-stocks. Wash contaminated clothing before reuse.

Respiratory protection

Breathing apparatus in the event of aerosol. Particle filter half mask, filter P1; Particle filter half mask, filter P3 - Norm NF EN 149

Hand protection

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

Appropriate Material	nitrile rubber - NBR
Material thickness	> 0.3 mm
Breakthrough time	8 h

Trade name: Acid citricum monohyd fine Granular

Substance number: 060165

Version: 3 / CH

Date revised: 16.10.2023

Replaces Version: 2 / CH

Print date: 16.10.23

Hand protection must comply with EN 374.

Eye protection

Eye protection must comply with EN 166. Safety glasses with side protection shield

Body protection

Impermeable protective clothing

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

Physical state	Powder to fine granulates		
Colour	colourless to white		
Odour	odourless		
Melting point			
Value	153		°C

Freezing point			
Remarks	No data available		

Flash point			
Remarks	Not applicable		

pH value			
Value	1.8		
Concentration/H ₂ O	50	g/l	
Temperature	25	°C	

Viscosity			
dynamic			
Value	2.549		ps
Temperature	20	°C	

Solubility(ies) ***	
Remarks	Ethanol

Partition coefficient n-octanol/water (log value)

Citric Acid Monohydrate, Fine Granular	
p _{OW}	to -1.67

Vapour pressure ***			
Value	1.7	to 8	mmHg
Temperature	25	°C	

Density and/or relative density		
Value	1.54	
Temperature	20	°C
Remarks	Relative Density according specification	
Value	1.54	g/cm ³

9.2. Other information

Auto-ignition temperature	
Value	1010 °C

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reactions known.

10.2. Chemical stability

Trade name: Acid citricum monohyd fine Granular

Substance number: 060165

Version: 3 / CH

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Replaces Version: 2 / CH

Print date: 16.10.23

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Avoid dust formation.

10.4. Conditions to avoid

Avoid dust formation. Keep away from sources of heat and ignition.

10.5. Incompatible materials

Strong oxidising agents, Strong bases, Metals

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity (Components)****Citric acid, monohydrate**

Species	rat		
LD50		11700	mg/kg
Method	OECD 401		
Remarks	anhydrous		

Citric acid, monohydrate

Species	mouse		
LD50		5400	mg/kg
Remarks	anhydrous		

Citric acid, monohydrate

Species	rat		
LD50		3000	mg/kg
Remarks	anhydrous		

Acute dermal toxicity (Components)**Citric acid, monohydrate**

Species	rat		
LD50	>	2000	mg/kg
Method	OECD 402		
Remarks	anhydrous		

Acute inhalative toxicity (Components)**Citric acid, monohydrate**

Remarks Irritating to respiratory system.

Skin corrosion/irritation (Components)**Citric acid, monohydrate**

Species	rabbit		
evaluation	non-irritant		
Method	OECD 404		

Serious eye damage/irritation (Components)**Citric acid, monohydrate**

Species	rabbit		
evaluation	strongly irritant		
Method	OECD 405		

Sensitization (Components)**Citric acid, monohydrate**

Remarks No data available.

Mutagenicity (Components)

Trade name: Acid citricum monohyd fine Granular

Substance number: 060165

Version: 3 / CH

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Replaces Version: 2 / CH

Print date: 16.10.23

Citric acid, monohydrate

evaluation	No mutagenicity in the Ames-test.
Method	OECD 471

Reproduction toxicity (Components)**Citric acid, monohydrate**

Route of exposure	oral
Species	rat
evaluation	No negative effects

Carcinogenicity (Components)**Citric acid, monohydrate**

Remarks	Not documented.
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11.2 Information on other hazards**Endocrine disrupting properties with respect to humans****Citric Acid Monohydrate, Fine Granular**

This substance does not have endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information *****12.1. Toxicity****Fish toxicity (Components)****Citric acid, monohydrate**

Reference substance	Citric acid, monohydrate
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Daphnia toxicity (Components)**Citric acid, monohydrate**

Species	Daphnia		
EC50	120		mg/l
Duration of exposure	72	h	

Bacteria toxicity (Components)**Citric acid, monohydrate**

Species	Pseudomonas putida		
EC50	> 100000		mg/l
Duration of exposure	16	h	

12.2. Persistence and degradability**Biodegradability (Components)****Citric acid, monohydrate**

evaluation	Readily biodegradable
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12.3. Bioaccumulative potential**Partition coefficient n-octanol/water (log value)****Citric Acid Monohydrate, Fine Granular**

pOW	to	-1.67
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12.5. Results of PBT and vPvB assessment**Results of PBT and vPvB assessment *******Citric Acid Monohydrate, Fine Granular**

The Substance does not meet PBT-criteria.

Citric Acid Monohydrate, Fine Granular

This substance does not meet the vPvB-criteria.

Trade name: Acid citricum monohyd fine Granular

Substance number: 060165

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12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment****Citric Acid Monohydrate, Fine Granular**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 13: Disposal considerations**SECTION 14: Transport information *****

	Land transport ADR/RID ***	Marine transport IMDG/GGVSee ***	Air transport ICAO/IATA ***
14.1. UN number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.

SECTION 15: Regulatory information *****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Water Hazard Class (Germany) *****

Water Hazard Class (Germany) WGK 1

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

SECTION 16: Other information**Hazard statements listed in Chapter 3**

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

CLP categories listed in Chapter 3

Eye Irrit. 2 Eye irritation, Category 2

STOT SE 3 Specific target organ toxicity - single exposure, Category 3

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.