

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

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

### **1.1. Product identifier**

Acid citricum anhydricum pulvis

Item No. 06015700

### **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 sdb@haenseler.ch

person responsible

for this SDS

### **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.

P312 Call a POISON CENTRE or doctor if you feel unwell.

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

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

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

contains \*\*\* Citric acid, anhydrous

**2.3. Other hazards**

Dust can form an explosive mixture with air. The product is combustible.

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****Molecular weight**

Value	192.12	g/mol
-------	--------	-------

**Hazardous ingredients****Citric acid, anhydrous**

CAS No.	77-92-9	
EINECS no.	201-069-1	
Registration no.	01-2119457026-42-XXXX	
Concentration	>= 50	%
Classification (Regulation (EC) No. 1272/2008)		
	Eye Irrit. 2	H319
	STOT SE 3	H335

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

Take off contaminated clothing and shoes immediately. In case of persistent symptoms consult doctor.

**After inhalation**

Ensure supply of fresh air. In the event of symptoms take medical treatment.

**After skin contact**

Wash off with soap and water. Consult a doctor if skin irritation persists.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

**After ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. By continuous complaints consult a physician.

**4.3. Indication of any immediate medical attention and special treatment needed****Hints for the physician / treatment**

Treat symptomatically

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

Water spray jet, Foam, Dry chemical extinguisher, Carbon dioxide

**Non suitable extinguishing media**

Full water jet

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

**5.2. Special hazards arising from the substance or mixture**

The product is combustible. In case of combustion evolution of dangerous gases possible. Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>)

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

Use self-contained breathing apparatus. Use personal protective clothing.

**Other information**

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Cool endangered containers with water spray jet.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep away unprotected persons. Ensure adequate ventilation. Avoid dust formation. Avoid contact with eyes and skin.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Advise water authority if spillage has entered water course or drainage system.

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

Take up mechanically and collect in suitable container for disposal. When picked up, treat material as prescribed under Section 13 "Disposal".

**6.4. Reference to other sections**

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

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

Keep container tightly closed. Wear protective equipment. Avoid the formation and deposition of dust. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Advice on protection against fire and explosion**

Avoid dust formation.

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

Value	10	30	°C
-------	----	----	----

**Requirements for storage rooms and vessels**

Keep only in original packaging. Keep tightly closed in a dry and cool place.

**Hints on storage assembly**

Do not store together with: Foodstuffs

**Storage classes**

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

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

## Exposure limit values

### Citric acid, anhydrous

List	SUVA	
Type	MAK	
Value	2	mg/m <sup>3</sup>
Short term exposure limit	4	mg/m <sup>3</sup>
Remarks: SSc; AW Reizung		

## Predicted No Effect Concentration (PNEC)

### Citric acid, anhydrous

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 of value	PNEC	
Type	Freshwater sediment	
Concentration	34.6	mg/kg/d
Type of value	PNEC	
Type	Sediment	
Concentration	3.46	mg/kg/d
Type of value	PNEC	
Type	Soil	
Concentration	33.1	mg/kg/d

## 8.2. Exposure controls

### General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. Wash hands before breaks and after work.

### Respiratory protection

Breathing apparatus in the event of aerosol. Particle filter P2; Respiratory protection according to EN141

### 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	Natural Latex	
Material thickness	0.5	mm
Breakthrough time	>= 8	h
Hand protection must comply with EN 374.		
Appropriate Material	Polychloroprene	
Material thickness	0.5	mm
Breakthrough time	>= 8	h
Appropriate Material	nitrile rubber - NBR	
Material thickness	0.35	mm
Breakthrough time	>= 8	h
Appropriate Material	Butyl rubber	

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

Material thickness	0.5	mm
Breakthrough time	>= 8	h
Appropriate Material	Fluoro carbon rubber - FKM	
Material thickness	0.4	mm
Breakthrough time	>= 8	h
Appropriate Material	PVC	
Material thickness	0.5	mm
Breakthrough time	>= 8	h

**Eye protection**

Tightly fitting safety glasses; Eye protection must comply with EN 166.

**Body protection**

Protective clothing

**Environmental exposure controls**

Do not allow to enter drains or water courses.

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

<b>Physical state</b>	Granules
<b>Colour</b>	white
<b>Odour</b>	odourless
<b>Physical state</b>	Crystalline powder

**Melting point**

Value	153	°C
-------	-----	----

**Boiling point or initial boiling point and boiling range**

Value	> 175	°C
-------	-------	----

**Flash point**

Value	345	°C
Method	closed cup	

**Decomposition temperature**

Value	> 175	°C
-------	-------	----

**pH value**

Value	1.8	
Concentration/H <sub>2</sub> O	50	g/l
Temperature	25	°C

**Vapour pressure**

Value	< 0.001	hPa
Temperature	20	°C

**Density and/or relative density**

Value	1.665	g/cm <sup>3</sup>
Temperature	20	°C

**9.2. Other information****Solubility in water**

Value	590	to	1450	g/l
-------	-----	----	------	-----

**Explosive properties**

evaluation	Dust
------------	------

**Oxidising properties**

evaluation	None known
------------	------------

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

**Other information**

Forms explosive mixture with air are possible.

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

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

Stable under recommended storage and handling conditions (see section 7).

**10.3. Possibility of hazardous reactions**

No decomposition if stored and applied as directed.

**10.4. Conditions to avoid**

Protect from atmospheric moisture and water. Avoid dust formation. Keep away from sources of heat and ignition. danger of dust explosion

**10.5. Incompatible materials**

Incompatible with alkaline substances . Oxidising agents, Acids, Nitrites

**10.6. Hazardous decomposition products**

In the event of fire the following can be released: Carbon monoxide and carbon dioxide

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

Species	mouse	
LD50	5400	mg/kg
Method	OECD 401	

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

Species	rat	
LD50	> 2000	mg/kg
Method	OECD 402	

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

Species	rabbit
evaluation	non-irritant
Method	OECD 404

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

evaluation	irritant
------------	----------

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

Remarks	None
---------	------

**Subacute, subchronic, chronic toxicity (Components)****Citric acid, anhydrous**

Route of exposure	oral
Species	rat

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

NOAEL	1200	mg/kg
Long term		
Duration of exposure	2	y
Remarks	negative on animals	

**Mutagenicity (Components)****Citric acid, anhydrous**

Species	Salmonella typhimurium
evaluation	No experimental information on genotoxicity in vitro available.

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

evaluation	No negative effects
------------	---------------------

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

evaluation	No negative effects
------------	---------------------

**Specific Target Organ Toxicity (STOT) (Components)****Citric acid, anhydrous**

evaluation	May cause respiratory irritation.
	Route of exposure inhalative
	Organs: Respiratory tract

**11.2 Information on other hazards****Endocrine disrupting properties with respect to humans**

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

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

Species	golden orfe (Leuciscus idus)	
LC50	440	mg/l
Duration of exposure	48	h
Method	OECD 203	

**Daphnia toxicity (Components)****Citric acid, anhydrous**

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

**Citric acid, anhydrous**

Species	Daphnia magna	
LC50	1535	mg/l
Duration of exposure	24	h

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

EC50	> 100000	mg/l
------	----------	------

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

Value	97	%
-------	----	---

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

Duration of test 28 d  
 evaluation Readily biodegradable  
 Method OECD 301 B

**12.3. Bioaccumulative potential****Octanol/water partition coefficient (log Pow) (Components)****Citric acid, anhydrous**

log Pow -1.80 to -1.61

Remarks Not relevant

**12.5. Results of PBT and vPvB assessment****Results of PBT and vPvB assessment \*\*\***

The Substance does not meet PBT-criteria.

This substance does not meet the vPvB-criteria.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

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

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

**Disposal recommendations for packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
<b>14.1. UN number</b>	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 WGK 1

(Germany)

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

**15.2. Chemical safety assessment**

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

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

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.



Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 4 / CH

Date revised: 12.06.2024

Replaces Version: 3 / CH

Print date: 12.06.24

### 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.