

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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

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.

Precautionary statements

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.

SECTION 3: Composition/information on ingredients ***

Molecular weight

Value 192.12 g/mol

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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

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

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 (CO₂)

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**

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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

SECTION 8: Exposure controls/personal protection ***

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)

Citric acid, anhydrous

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)	

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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

Hand protection

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

Eye protection

Safety glasses with side protection shield

Body protection

Protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Granules
Colour	white
Odour	odourless
Form	Crystalline powder

pH value

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

Melting point

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

Value	153	°C
Initial boiling point and boiling range		
Value	> 175	°C
Flash point		
Value	345	°C
Method	closed cup	
Vapour pressure		
Value	< 0.001	hPa
Temperature	20	°C
Density		
Value	1.665	g/cm ³
Temperature	20	°C
Solubility in water		
Value	1450	g/l
Temperature	20	°C
Partition coefficient: n-octanol/water		
log Pow	to -0.2	
Decomposition temperature		
Value	> 175	°C
Explosive properties		
evaluation	Dust	
Oxidising properties		
evaluation	None known	

9.2. Other information**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. Do not use a full water jet – 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 toxicological effects**

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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		
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		
------------	---------------------	--	--

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		

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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

12.3. Bioaccumulative potential**Partition coefficient: n-octanol/water**

log Pow to -0.2

12.5. Results of PBT and vPvB assessment**Evaluation of persistence and bioaccumulation potential (Components)****Citric acid, anhydrous**

The product contains no PBT or vPvB substances.

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
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**

Trade name: Acid citricum anhydricum pulvis

Substance number: 060157

Version: 3 / CH

Date revised: 22.06.2021

Replaces Version: 2 / CH

Print date: 22.06.21

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.

CLP categories listed in Chapter 3

Eye Irrit. 2 Eye irritation, Category 2

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.