

Printing date 07.12.2022

Revision: 07.12.2022

Trade name: Citric acid anhydrate F0000

- · Results of PBT and vPvB assessment
- · **PBT:**

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

3 Composition/information on ingredients

- · Chemical characterisation: Substances
- · CAS No. Description
- 77-92-9 Citric acid anhydrate
- · Identification number(s)
- EC number: 201-069-1

4 First aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:
- Drink plenty of water.

If swallowed, DO NOT induce vomiting.

- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture In case of fire, the following can be released:
- Carbon monoxide, carbon dioxide
- Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- Avoid contact with eyes and skin Avoid formation of dust. Avoid breathing dust. Ensure adequate ventilation
- Wear protective clothing.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.
- *Reference to other sections* See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

(Contd. on page 3)

(Contd. of page 1)

⁻ El

Printing date 07.12.2022

Revision: 07.12.2022

Trade name: Citric acid anhydrate F0000

See Section 13 for disposal information.

7 Handling and storage

· Handling:

- **Precautions for safe handling** Prevent formation of dust.
- Avoid inhalation of dust Avoid contact with skin, eyes and clothing.
- Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Store in a place with an acid-proof bottom. Keep container tightly closed in a dry, cool, well-ventilated place. Protect from moisture.
- *Information about storage in one common storage facility:* Store away from oxidising agents. Do not store together with alkalis (caustic solutions).
- Further information about storage conditions:
- *Store in dry conditions. Keep container tightly sealed.*
- Do not store at temperatures above $30 \circ C$.
- Storage class: 10-13
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

- · Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Do not eat, drink, smoke or sniff while working. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.
- · Respiratory protection: In dust formation respiratory protection required.
- Protection of hands:



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

Natural rubber, NR

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

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

(Contd. of page 2)

Printing date 07.12.2022

Revision: 07.12.2022

(Contd. of page 3)

Trade name: Citric acid anhydrate F0000

• Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Physical and chemical properties		
· Information on basic physical and chemical properties · General Information		
Appearance: Form:	Crystalline powder	
Colour:	<i>White</i>	
Odour:	Odourless	
pH-value at 25 °C:	1.8 (5%)	
Change in condition Melting point/freezing point: Initial boiling point and boiling range	135-152 °C e: not determined	
Flash point:	not applicable	
Flammability (solid, gas):	Product is not flammable.	
Ignition temperature:	1010 °C	
Explosive properties:	Product does not present an explosion hazard.	
Density at 20 °C:	1.665 g/cm ³	
Solubility in / Miscibility with water at 20 °C:	1450 g/l	
Partition coefficient: n-octanol/water:	1.80.2 log KOW	
Other information	No further relevant information available.	

10 Stability and reactivity

• *Reactivity* No further relevant information available.

· Chemical stability

The product is stable if the regulations / instructions for storage and handling are observed.

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid Avoid dust formation.
- *Incompatible materials:* Strong oxidizing agents Strong bases

11 Toxicological information

· Information on toxicological effects

· Acute toxicity Based on available data, the classification criteria are not met.

- · Skin corrosion/irritation Slight irritant effect possible does not require labeling.
- · Serious eye damage/irritation

Causes serious eye irritation.

(Contd. on page 5)

[•] Primary irritant effect:

EU

Printing date 07.12.2022

Revision: 07.12.2022

(Contd. of page 4)

Trade name: Citric acid anhydrate F0000

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met. • **Additional toxicological information:**
- The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- *Reproductive toxicity Based on available data, the classification criteria are not met.*
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

· Toxicity

• Aquatic toxicity:

- EC50 / 72 h > 100 mg / l (Daphnia magna)
- LC50 / 96 h > 100 mg / l (Leuciscus idus)
- · Persistence and degradability Easily biodegradable
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· Results of PBT and vPvB assessment

• PBT: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

- vPvB: This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number

· ADR, ADN, IMDG, IATA

· UN proper shipping name

Void Void

· ADR, ADN, IMDG, IATA

(Contd. on page 6)

EU -

Printing date 07.12.2022

Revision: 07.12.2022

Trade name: Citric acid anhydrate F0000

		(Contd. of page 5)
· Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
· Packing group · ADR, IMDG, IATA	Void	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex II and the IBC Code	of Marpol Not applicable.	
· UN "Model Regulation":	Void	

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

- · Directive 2012/18/EU
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II Substance is not listed.
- REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
- Substance is not listed.
- · Annex II REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed.
- Regulation (EC) No 273/2004 on drug precursors Substance is not listed.
- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors Substance is not listed.
- · Chemical safety assessment: A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Stever
- 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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- ADR: Accord relatif au transport international 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 Harmonised 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)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

 $Eye \ Irrit. \ 2: Serious \ eye \ damage/eye \ irritation-Category \ 2$