

SAFETY DATA SHEET

CITRIC ACID MONOHYDRATE

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

1.1 Product identifier:	
CAS Number:	5949-29-1
EC number:	231-202-6
1.2 SYNONYMS:	• Citric acid • 2-hydroxy • 1 2 3-propanetriccarboxylic acid • bethathydroxy

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:	Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.
2.2 Label elements:	Labelling according to Regulation (EC) No 1272/2008
Hazard Pictograms:	
Signal Word:	Warning
Hazard statements:	H315: Causes skin irritation. H319: Causes serious eye irritation..
Precautionary Statements:	P280: Wear protective gloves/ protective clothing/ eye protection/ face protection. P264: wash thoroughly after handling
2.3 Other hazards:	
Inhalation:	may cause respiratory irritation, dizziness, headache, or nausea.
Ingestion:	Ingestion of large amounts of citric acid monohydrate may cause gastrointestinal irritation, including symptoms such as nausea, vomiting, or diarrhea.

Skin Contact:	may cause irritation, redness and discomfort in large quantities
Eye contact:	Can cause severe irritation, redness, pain and discomfort.
Chronic Exposure:	may lead to skin dryness and irritation in large amounts
Aggravation of pre-existing conditions:	may aggravate pre-existing skin conditions, such as eczema or dermatitis,

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation:	Substances
CAS No:	Description: 5949-29-1 CITRIC ACID MONOHYDRATE
Identification number(s):	EC number: 231-202-6

SECTION 4: First aid measures

4.1 Description of first aid measures	
General information:	
After inhalation:	If breathed in, move person into fresh air. Consult a physician
After skin contact:	Remove contaminated clothes, rinse skin with plenty of water. Consult a physician.
After eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes, Holding eyelids during flushing. Do not apply neutralizing agents. consult a physician.
After swallowing:	Rinse mouth with water. Immediately after ingestion. Give lots of water to drink. Do not induce vomiting. Consult a physician.
4.2 Most important symptoms and effects, both acute and delayed:	Acute exposure to citric acid monohydrate can cause skin and eye irritation, respiratory discomfort if inhaled, and

	gastrointestinal upset if ingested, while delayed effects are generally minimal, though prolonged exposure may lead to skin dryness or irritation.
4.3 Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:	Carbon dioxide. Water spray. Alcohol-resistant foam. Dry chemical or foam.
5.2 Special hazards arising from the substance or mixture:	Fire or excessive heat may cause production of hazardous decomposition products..
5.3 Advice for firefighters:	Wear fully protective suit, safety glasses and respiratory device . Cool tanks/drums with water spray/remove them into safety.
5.4 further information:	Neutralizing Agent: Soda ash or Sodium Bicarbonate.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Avoid dust accumulation. Seek medical attention.
6.2 Environmental precautions:	Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Avoid entering into waterways.
6.3 Methods and material for containment and cleaning up:	Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite, powdered limestone.

	Scoop absorbed substance into closing containers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling
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SECTION 7: Handling and storage

7.1 Precautions for safe handling:	Make sure product stored in DRY-COOL area. Protect from heat and direct sun exposures Make sure that there is no sunlight coming inside the space. Electrostatic discharge protection. Minimize dust generation and accumulation. Avoid ingestion and inhalation. Avoid contact with eyes and skin. Do not Breathe dust.
7.2 Conditions for safe storage, including any incompatibilities:	Store in original containers. Keep containers securely sealed Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Store in a dry and dark area. . Provide for a tub to collect spills.
Requirements to be met by storerooms and receptacles:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses:	no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Additional information about design of technical facilities:	A system of local and general exhaust is recommended.
8.2 Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	Dust respirator, protective masks, wearing anti chemical gloves, rubber gloves, etc.
General protective and hygienic measures:	Eyes, body and hand protection, maintain indoor air unobstructed. Wear protective equipment.
	Respiratory protection: Required.
Protection of hands:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws. Wash and dry hands.
	Eye protection: Required
Protection of Body:	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information	
Appearance: Form:	Crystalline powder
Colour:	White
Odour:	Odourless
pH-value:	2.2-2.5% (in solution at 5%)
Melting point/Melting range:	153°C
Boiling point/Boiling range:	Not applicable
Flammability (solid, gaseous):	No data available

Ignition temperature:	No data available
Decomposition temperature:	No data available
Self-igniting:	Not applicable
Flash point:	Not applicable
Danger of explosion:	No data available
Explosion limits: Lower:	No data available
Explosion limits: Upper:	No data available
Vapour pressure:	No data available
Density at 20 °C:	1.542
Relative density:	No data available
Vapour density:	No data available
Evaporation rate:	No data available
Solubility in / Miscibility with- water at 20 °C:	Completely soluble
Partition coefficient:(n- octanol/water)	59.2 gms/100ml in water
Viscosity:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	This chemical is stable at room temperature.
10.3 Possibility of hazardous reactions	None
10.4 Conditions to avoid	High temperature, sparks, and open flames.
10.5 Incompatible materials	Caustic (Alkalis). Solution are mildly corrosive to carbon steel
10.6 Hazardous decomposition products	No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	LD50 (Oral, Rat) : No data available LD50 (Dermal, Rabbit) : No data available LC50 (Inhalation Rat) : no data available
Skin corrosion/Irritation:	May cause skin irritation and corrosion in large quantities

Serious eye damage/irritation:	May cause eye irritation
Respiratory damage/irritation:	May cause respiratory irritation
Ingestion:	May cause gastrointestinal irritation
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Signs and Symptoms of Exposure:	Refer section 2.3
11.2 Additional toxicological information	
Biodegradability:	Biodegradable in aerobic environments.

SECTION 12: Ecological information

12.1 Toxicity Aquatic toxicity:	Highly toxic for fish, not considered to be toxic for Bacteria.
12.2 Persistence and degradability:	Readily biodegradable in water.
12.3 Bioaccumulative potential:	No data available
12.4 Mobility in soil:	No data available
12.5 Other adverse effects:	No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods	
Uncleaned packaging Recommendation:	dispose of in accordance with local hazardous waste regulations
Recommended cleansing agents:	Mild Soap and Water, sodium bicarbonate or diluted sodium hydroxide

SECTION 14: Transport information

14.1 UN-Number · ADR, ADN, IMDG, IATA:	Not applicable
14.2 UN proper shipping name · ADR, ADN, IMDG, IATA:	Not applicable
14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA :	Not applicable
14.4 Packing group · ADR, IMDG, IATA:	Not applicable
14.5 Environmental hazards:	No data available
14.6 Special precautions for user:	Handle responsibly.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Directive 2012/18/EU	Directive 2012/18/EU, under that this substance is not classified in listed substance.
Named dangerous substances:	This substance is not listed in the annex 1 to the directive.
15.2 Chemical safety assessment:	Chemical assessment has not been carried out.

SECTION 16: Other information

The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product