

Revision: 2.0
(Replaces revision 1.2 of 16 April 2021)Revision date: 06 November 2023
Date printed: 11 November 2023**Section 1. Identification**

1.1 Product Identifier 0182

Product Name CITRIC ACID H₂O

CAS Number 5949-29-1
REACH Registration No 01-2119457026-42-XXXX

Molecular Formula $C(OH)(COOH)(CH_2COOH)_2 \cdot H_2O = 210.14$

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

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(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification**2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Serious eye damage/irritation, category 2
Spec target organ tox - single, category 3

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

2.2 Label elements**Labelling according to regulation 1272/2008/EC**

Signal word Warning

Hazard Pictograms



Hazard Statements Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statements Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Citric acid	5949-29-1	201-069-1	01-2119457026-42-XXXX	100%	Eye Irrit. 2, STOT SE 3 (I)

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water.
Inhalation	Remove from exposure. Seek medical attention if irritation persists.
Ingestion	Wash out the patients mouth thoroughly with water. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Water spray.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May support combustion at high temperatures.
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5.3 Advice for firefighters

Advice for firefighters	Consider all other materials in the vicinity.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Presents no major hazards.
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6.2 Environmental precautions

Environmental	Presents no major environmental hazard.
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6.3 Methods and material for containment and cleaning up

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period
Citric acid	5949-29-1	100%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.

Hand Protection Wear gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White crystalline powder or granules.
Odour	No specific odour.
pH	2 @ 20°C solution.
Boiling Point	Not available
Melting Point	153°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	345°C
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.5450
Water Solubility	60%

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous reactions No data available.

10.4 Conditions to Avoid No specific conditions.

- 10.5** Incompatible Materials Strong oxidising agents. Alkalis. Reducing agents.
- 10.6** Hazardous Decomposition Products None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust may be irritating to the eyes.
Skin	Contact with the solid or dust may be irritating to the skin.
LD50 Skin	Not available
Ingestion	Ingestion of large amounts may cause diarrhoea, nausea, vomiting, hyperpnoea and convulsions.
LD50 Oral	5040mg/kg Human
Inhalation	Inhalation of dust may produce irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.
Other Information	Used in the food industry.

Section 12. Ecological

- 12.1** Toxicity Readily bio-degraded in the environment. Does not bioaccumulate. Practically non toxic to: fish LC50- >100mg/l, daphnia EC50 >100mg/l.
- LC50 Algal Not available
- LC50 Crustacea Not available
- LC50 Fish Not available
- 12.2** Persistence and degradability No data available.
- 12.3** Bioaccumulative potential No data available.
- 12.4** Mobility in soil No data available.
- 12.5** Results of PBT & vPvB assessment Assessment not required.
- 12.6** Other adverse effects None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Do not dispose of as domestic waste. Dispose of to a licensed land fill site.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	Non-restricted
14.2 Proper Shipping Name	Non-restricted
14.3 Transport classes	
UN classification	None
Subsidiary hazard(s)	None
Transport category	None
ADR Hazard ID	Non-restricted
Tunnel Restriction Code	Non-restricted
14.4 Packing Group	None
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Serious eye damage/irritation, category 2; Spec target organ tox - single, category 3

Signal word Warning

Hazard Pictograms



Hazard Statements H319, H335
Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statements P264, P280, P305+P351+P338, P337+P313
Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection / face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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