



Specification

Product Name: Citric Acid
Product Code: SPEC0010
Chemical Formula: $C_6H_8O_7$
Molecular Weight: 192.13
EINECS: 201-069-1
CAS number: 77-92-9
Particle Size: 12-40 Mesh

Description:

Our Citric Acid is a premium-quality anhydrous powder. Add to provide a tart, sharp or sour taste to food and drinks. A natural ingredient.

Specifications:

No.	Item	Unit	BP2014	USP37	E330	FCC8	GB1987-2007	Taihe Standard
1	Characters		Colourless crystals or granulars, white crystalline powders					
2	Identification		Pass Test					
3	Clarity & Colour of Solution		Pass Test	Pass Test	/	/	/	Pass Test
4	Assay	%	99.5 – 100.5	99.5 – 100.5	≥99.5	99.5-100.5	99.5-100.5	99.5-100.5
5	Moisture	%	≤1.0	≤1.0	≤0.5	≤0.5	≤0.5	≤0.5
6	Readily Carbonisable Substances		Not exceeding standard	Not exceeding standard	Not exceeding standard	Not exceeding standard	≤1.0	Not exceeding standard
7	Sulphated Ash	%	≤0.1	≤0.1	≤0.05	≤0.05	≤0.05	≤0.05
8	Sulphate	ppm	≤150	≤150	/	/	≤100	≤100
9	Chloride	ppm	/	/	/	/	≤50	≤50
10	Oxalate	ppm	≤360	≤360	≤100	Pass Test	≤100	≤100
11	Calcium	ppm	/	/	/	/	≤200	≤200
12	Aluminum	ppm	≤0.2	≤0.2	/	/	/	≤0.2
13	Arsenic	ppm	/	/	≤1	/	≤1	≤1

14	Lead	ppm	/	/	≤0.5	≤0.5	≤0.5	≤0.5
15	Mercury	ppm	/	/	≤1	/	/	≤1
16	Heavy Metals	ppm	≤10	≤10	≤5	/	/	≤5
17	Bacterial Endotoxins	IU/mg	≤0.5	Pass Test	/	/	/	≤0.5

Ingredients:

Citric Acid (E330)

Dietary Information:

Suitable for Vegans & Octo-Lacto Vegetarians, Non-GMO, Non-Irradiated.

Nutritional Information:

Based on typical content/100g: Energy: 999kj/239kcal, Fat: 0g, Carbohydrates: 0g, Protein: 0g, Salt: <0.05g.

Storage:

Store in dry, cool conditions and in a tightly closed container.

Packaging:

Size	EAN
50g	5056191001970
100g	5060341112089
250g	5060341112102
500g	5060341112119
5kg	5056191004810
10kg	5056191004827

Shelf Life:

38 months from production date.

Allergen Declaration

Allergen	Contains (Y/N)
Cereals containing Gluten	N
Crustaceans	N
Eggs	N
Fish	N
Peanuts	N
Soybeans	N
Milk	N
Nuts	N
Celery	N
Mustard	N
Sesame Seeds	N

Sulphur Dioxide and Sulphites (at concentration of more than 10mg/kg or 10mg/L in terms of Sulphur Dioxide)	N
Lupin	N
Molluscs	N

Material Safety Data Sheet

1: Substance/Preparation and Company Identification:

1.1 – Product Identifier

Trade Name: Citric Acid Anhydrous
CAS No: 77-92-9
EC No: 201-069-1
Index number: 607-750-00-3
REACH Registration No: 01-2119457026-42-0022

1.2 – Relevant identified uses of the substance or mixture and uses advised against:

Application of the substance / the preparation:

Formulation
Intermediate
Cleaning products
Personal care products
Paper industry
Cement retardation products
Polymers and plastics
Scale inhibition in oilfield water systems
Textile industry
Coatings and paints
Photographic processing
Anti-scalant, complexing agent in water treatment systems
Treatment of metal surfaces
Cleaning of metal surfaces
Agricultural applications
Laboratory reagent

1.3 – Details of the supplier of the Material Safety Data Sheet

Supplier Name: Special Ingredients Ltd
Address: 4 Foxwood View, Chesterfield, S41 9RN.
Tel: 0044 (0)1246 906247.
E-mail address: <https://specialingredients.co.uk/pages/contact>,

1.4 – Emergency Telephone Number

Special Ingredients Ltd: 07701 095864.
NHS Direct: 111
National Poisons Information Service: 0121 507 4123 (healthcare professional only)

2: Hazard Identification:

2.1 – Classification of the substance or mixture

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Classification in accordance to Regulation (EC) No. 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07

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.
P264	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.
P312	Call a POISON CENTER/doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.

2.3 Other hazard

The substance is not PBT or vPvB.

The substance does not have endocrine disrupting properties.

3: Composition/information on ingredients**3.1 – Substances**

Substance Name:	Citric Acid Anhydrous
CAS No:	77-92-9
EC No:	201-069-1
Weight content range (%):	>=99.5
Index number in CLP Annex VI:	607-750-00-3
SCL/M-factor/ATE:	Not applicable.
Nanoform:	Not applicable.

4: First Aid Measures:**4.1 – Description of first aid measures**

Inhalation:	Move patient to fresh air, if symptoms persist consult a doctor.
After skin contact:	Immediately rinse with water.

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If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth and then drink plenty of water.
Do not induce vomiting.

4.2 – Most important symptoms and effects, both acute and delayed

Symptoms: Severe eye irritation. Cough
Risks: Causes serious eye irritation. May cause respiratory irritation.

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

No further relevant information available.

5: Firefighting Measures:

5.1 – Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet.

5.2 – Special hazards arising from the substance or mixture

Carbon dioxide (CO₂)

Carbon monoxide (CO)

5.3 – Advice for firefighters

Wear fully protective suit.

Wear self-contained respiratory protective device.

6: Accidental Release Measures:

6.1 – Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

Ensure adequate ventilation.

Use personal protective equipment. Keep unprotected persons away.

Avoid inhaling dust and fumes.

Avoid contact with the skin and the eyes.

6.2 – Environmental precautions

No special measures required.

6.3 – Methods and materials for containment and cleaning up

Send for recovery or disposal in suitable receptacles.

Non-sparking tools should be used.

Retrieve the product by mechanical means.

6.4 – Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7: Handling And Storage:

7.1 – Precautions for safe handling

Prevent formation of dust.

Keep away from source of ignition.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Information about fire - and explosion protection: No special measures required.

7.2 – Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in a dry, cool and well-ventilated area.

Keep container tightly closed.

Provide acid-resistant floor.

Information about storage in one common storage facility:

Store away from strong bases and oxidizing agents.

7.3 – Specific end use(s):

No further relevant information available.

8: Exposure Controls/ Personal Protection:

8.1 – Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

PNECs	
PNEC	0.44 mg/L (Water (Freshwater)) 0.044 mg/L (Water (Marine Water)) >1,000 mg/L (Sewage Treatment Plant (STP))
PNEC	3.46 mg/kg sedim. dw (Sediment (Marine Water)) 34.6 mg/kg sedim. dw (Sediment (Freshwater))
PNEC	33.1 mg/kg soil dw (Soil)

Additional information: The lists valid during the making were used as basis.

8.2 – Exposure controls

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Do not eat, drink, smoke or sniff while working.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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Filter P2

Hand protection

Protective Gloves.

Eyel/face protection

Safety Goggles (EN 166).

Have an eye wash station available.

Body protection:

Protective work clothing.

Environmental exposure controls:

Avoid the release of the product into the environment. Comply with local and national law.

9: Physical and Chemical Properties:

9.1 – Information on basic physical and chemical properties

General Information

Physical state:	Solid.
Colour:	White.
Odour:	Odourless.
Odour Threshold:	Not determined
Melting / Freezing Point:	153°C
Boiling point or initial boiling point and boiling range:	Decomposes before boiling.
Flammability:	Product is not flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	>175 °C
pH:	Not determined.
Viscosity:	
Kinematic viscosity:	Not applicable.
VOC (EC):	
Dynamic:	Not applicable.
Solubility	
Water at 20 °C:	592 g/l
Partition co-efficient n-octanol/water (log value):	-1.6 to 1.8
Vapour pressure at 25 °C:	2.2E-6 Pa
Density and/or relative density	
Relative density at 20 °C:	1.665
Vapour density:	Not applicable.
Particle characteristics:	The fraction below 100 µm was 84.1%; the D50 of the fraction below 100 µm was at 31.99 µm.

9.2 Other information

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Appearance:

Form:	Crystalline
Ignition temperature:	Not applicable.
Explosive properties:	Product does not present an explosion hazard.
Softening point/range	
Oxidising properties	Not oxidising.
Evaporation rate:	Not applicable.

Information in regard to physical hazard classes

Explosives	Not applicable.
Flammable gases	Not applicable.
Aerosols	Not applicable.
Oxidising gases	Not applicable.
Gases under pressure	Not applicable.
Flammable liquids	Not applicable.
Flammable solids	Not applicable.
Self-reactive substances and mixtures	Not applicable.
Pyrophoric liquids	Not applicable.
Pyrophoric solids	Not applicable.
Self-heating substances and mixtures	Not applicable.
Substances and mixtures, which emit flammable gases in contact with water	Not applicable.
Oxidising liquids	Not applicable.
Oxidising solids	Not applicable.
Organic peroxides	Not applicable.
Corrosive to metals	Not applicable.
Desensitised explosives	Not applicable.

10: Stability and Reactivity:**10.1 – Reactivity**

No further information available.

10.2 – Chemical stability

Stable under normal circumstances.

10.3 – Possibility of hazardous reactions

No dangerous reactions known.

10.4 – Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flames.

10.5 – Incompatible materials

Strong bases

Oxidising bases

10.6 – Hazardous Decomposition products

Carbon Dioxide

Carbon Monoxide

11: Toxicological Information:

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11.1 – Information on hazard classes as defined in Regulation (EC) No 1272/2008.

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

LD/LC50 values:		
Oral	LD50	5,400 mg/Kg bw (Mouse) (OECD 401)
Dermal	LD50	>2,000 mg/Kg bw (Rat) (OECD 402)

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

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: May cause respiratory irritation.

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.

11.2 – Information on other hazards**11.2.1 – Endocrine disrupting properties**

Substance is not listed.

12: Ecological Considerations:**12.1 - Toxicity**

Aquatic toxicity:	
LC50/48h	440 mg/L (Fish) (OECD 2003)
NOEC	425 mg/L (Algae)
LC50/24h	1,535 mg/L (Daphnia Magna)

12.2 – Persistence and degradability

Readily biodegradable.

12.3 Bio-accumulative potential

Does not accumulate in organisms.

12.4 – Mobility in soil

pKa: 3.13, 4.76 and 6.4 at 25°C.

Additional environmental information:

General Notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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

12.5 – Results of PBT and vPvB assessment

PBT: No PBT.

vPvB: No vPvB.

12.6 – Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 – Other adverse effects**13: Disposal Considerations:****13.1 – Waste treatment methods**

Recommendation: Disposal must be made in accordance with official regulations.

Uncleaned packaging

Recommendation: Packaging that may not be cleansed must be disposed of in the same manner as the product.

14: Transport Information:**International transport Regulations****14.1 – UN number or ID 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
Class Not applicable

14.4 – Packing group

ADR, ADN, IMDG, IATA Not applicable

14.5 – Environmental hazard

Marine Pollutant: No

14.6 Special precautions for user

Not available

14.7 – Maritime transport in bulk according to IMO instruments

Not available

15: Regulatory Information:**15.1 – Safety, health and environmental regulations / legislation specific for the substance or mixture**

Quantities:

Canada Non-Domestic Substances List (NDSL) – Substance is not listed.

Directive 2012/18/EU

Named dangerous substances – ANNEX I – Substance is not listed.

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.

15.2 – Chemical safety assessment

A chemical Safety Assessment has been carried out.

16: Other Information:

Abbreviations and acronyms:

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)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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