Richest Group
No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Tel: 0086 21 5017 5386
E-mail: inquiry@richest-group.com
Web: www.richest-group.com

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Citric Acid Monohydrate	**Revision date:** 2026-10-27	**Version:** 1.0	**Brand:** Richest

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

Product name	Citric Acid Monohydrate
Synonyms	E330
CAS No.	5949-29-1
EC No.	201-069-1
Molecular formula	C6H10O8
Molecular weight	210.14 g/mol
Relevant identified uses	Acidulant and flavor enhancer in food products; sequestering agent and antioxidant synergist; component of anticoagulant citrate solutions
Uses advised against	None
Company	Richest Group Ltd.
Address	No. 999, Jiangyue Rd, Minhang, Shanghai 201114, China
Telephone	+86 21 5017 5386
WhatsApp	+86 13472638548
E-mail	inquiry@richest-group.com
Website	www.richest-group.com
Emergency telephone number	+86 13472638548

SECTION 2: Hazards identification

GHS Classification	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 (Not classified)
Pictogram(s)	None
Signal word	None
Hazard statement(s)	None
Precautionary statement(s)	None

Other hazards	Fine dust may form explosive mixtures with air.

SECTION 3: Composition/information on ingredients

Component	Citric acid monohydrate
CAS No.	5949-29-1
EC No.	201-069-1
Classification	Not classified
Concentration (%)	≤100 %

SECTION 4: First aid measures

If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Wash off with soap and plenty of water.
In case of eye contact	Flush eyes with water as a precaution.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Most important symptoms and effects	Inhalation: cough, sore throat. Skin: redness. Eyes: redness, pain. Ingestion: burning sensation
Indication of any immediate medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	None
Special hazards arising from the chemical	Carbon oxides
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid dust formation. Ensure adequate ventilation. Wear suitable protective equipment.

Environmental precautions	Prevent further leakage or spillage. Do not let product enter drains.
Methods and materials for containment and cleaning up	Sweep up and collect in suitable containers; dispose of in accordance with local regulations.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid dust formation. Wash hands thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Store at room temperature in a cool, dry and well-ventilated place in tightly closed containers.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	MAK: 2 mg/m³ (inhalable fraction, as citric acid)
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Ensure adequate ventilation. Eye wash stations and safety showers recommended.
Eye/face protection	Safety glasses.
Skin protection	Chemical-resistant gloves.
Body protection	Impervious work clothing.
Respiratory protection	Not required under normal conditions; wear suitable dust respirator when dust is generated.
Thermal hazards	No specific thermal hazards under normal conditions of use.

SECTION 9: Physical and chemical properties

Physical state	Crystal
Colour	Colorless or white
Odour	Odorless
Melting point / freezing point	135 °C
Boiling point or initial boiling point and boiling range	Decomposes on heating before boiling
Flammability	Combustible solid; dust explosion possible if in powder or granular form mixed with air
Lower and upper explosion limit /	Not determined; dust may form explosive mixtures with air

flammability limit	
Flash point	100 °C (as citric acid anhydrous, CAS 77-92-9)
Auto-ignition temperature	1010 °C
Decomposition temperature	175 °C
pH	ca. 1.8 (50 g/L in water)
Kinematic viscosity	Not applicable (solid)
Solubility	Water solubility 1630 g/L (20 °C)
Partition coefficient n-octanol/water	-1.72
Vapour pressure	Negligible at 20 °C
Density and/or relative density	0.791 g/cm3
Relative vapour density	Not applicable (solid)
Particle characteristics	No data available

SECTION 10: Stability and reactivity

Reactivity	The solution in water is a weak acid; attacks copper, zinc, aluminium and their alloys
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Decomposes above 175 °C; reacts with oxidants and bases; attacks metals (as citric acid anhydrous, CAS 77-92-9)
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 (oral, rat): 3000-12000 mg/kg (reported range, as citric acid anhydrous CAS 77-92-9); LD50 (oral, mouse): 5040 mg/kg
Skin corrosion/irritation	Not classified as irritating to skin.
Serious eye damage/irritation	Causes serious eye irritation (H319).
Respiratory or skin sensitization	Not classified (based on available data)
Germ cell mutagenicity	Not classified (based on available data)

Carcinogenicity	Not classified (based on available data); citric acid is not listed by IARC
Reproductive toxicity	Not classified (based on available data)
STOT - single exposure	STOT SE 3; H335: May cause respiratory irritation
STOT - repeated exposure	Not classified (based on available data)
Aspiration hazard	Not classified (based on available data)

SECTION 12: Ecological information

Toxicity to fish / daphnia / algae	LC50 (Carcinus maenas, 48h): 160 mg/L (formulated product, as citric acid anhydrous CAS 77-92-9)
Persistence and degradability	Readily biodegradable: 85% DOC removal after 1 day (Zahn-Wellens test), 100% DOC removal (AFNOR test, 42 days) (as citric acid anhydrous CAS 77-92-9)
Bioaccumulative potential	Estimated BCF 3 (log Kow -1.64, anhydrous); low potential for bioconcentration
Mobility in soil	Estimated Koc 10; very high mobility in soil (as citric acid anhydrous CAS 77-92-9)
Other adverse effects	None known

SECTION 13: Disposal considerations

Product disposal methods	Dispose of in accordance with local regulations. Do not discharge into drains.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards (Marine pollutant)	No
Special precautions for user	No special precautions required during transport.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	EINECS (EU): Listed (201-069-1); TSCA (USA): Listed; IECSC (China): Listed

SECTION 16: Other information

Full text of H-Statements	None
Revision date	2026-10-27
Version	1.0

Abbreviations and acronyms: CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

References: ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

Disclaimer: The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.