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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Citric Acid Anhydrous	**Revision date:** 2026-10-29	**Version:** 1.0	**Brand:** Richest

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

Product name	Citric Acid Anhydrous
Synonyms	2-Hydroxy-1,2,3-propanetricarboxylic acid; E330
CAS No.	77-92-9
EC No.	201-069-1
Molecular formula	C6H8O7
Molecular weight	192.12 g/mol
Relevant identified uses	Food acidulant, pH regulator, chelating agent, pharmaceutical excipient
Uses advised against	None
Company	Richest Group Ltd.
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SECTION 2: Hazards identification

GHS Classification	Serious eye damage/eye irritation Category 2
Pictogram(s)	GHS07 (Exclamation mark)
Signal word	Warning
Hazard statement(s)	H319 Causes serious eye irritation
Precautionary statement(s)	P264 Wash skin thoroughly after handling P280 Wear 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
Other hazards	None known.

SECTION 3: Composition/information on ingredients

Component	Citric acid anhydrous
CAS No.	77-92-9
EC No.	201-069-1
Classification	Eye Irrit. 2; H319
Concentration (%)	≤100 %

SECTION 4: First aid measures

If inhaled	Remove to fresh air. Get medical attention for any breathing difficulty.
In case of skin contact	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, call a specialist.
If swallowed	Drink plenty of water or milk when clear-headed. Call a physician if necessary.
Most important symptoms and effects	Irritating to eyes and skin. Inhalation of dust may irritate the respiratory tract. Extremely large oral dosages may produce gastrointestinal disturbances.
Indication of any immediate medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water, dry powder, chemical foam, carbon dioxide
Unsuitable extinguishing media	None known
Special hazards arising from the chemical	Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.
Advice for firefighters	In the event of fire, wear full protective clothing and self-contained breathing apparatus with full face piece operated in positive pressure mode.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid generation of dust.
Environmental precautions	Avoid generation of dust and keep the area ventilated. Prevent product from entering drains.
Methods and materials for containment and cleaning up	Sweep up and shovel. Flush away traces with water, or neutralize with lime. Keep in suitable closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling	Keep ventilated to avoid dust. Avoid contact with eyes and skin. Avoid inhalation and ingestion.
Conditions for safe storage, including any incompatibilities	Keep tightly closed in a dry, cool and ventilated place. Store protected from incompatible substances.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	MAK: 2 mg/m³ (inhalable fraction)
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Set eye washer or shower. Ensure adequate ventilation to keep low concentration in air.
Eye/face protection	Safety glasses.
Skin protection	Gloves.
Body protection	Lightweight protective clothing.
Respiratory protection	Effective dust mask.
Thermal hazards	No specific thermal hazards under normal conditions of use.

SECTION 9: Physical and chemical properties

Physical state	Solid (crystal)
Colour	White / colourless
Odour	Odourless
Melting point / freezing point	153 °C
Boiling point or initial boiling point and boiling range	Decomposes before boiling (> 170 °C)

Flammability	Fine dust dispersed in air may present a dust explosion hazard
Lower and upper explosion limit / flammability limit	Dust: 0.28-2.29 kg/m³ in air
Flash point	100 °C
Auto-ignition temperature	1010 °C
Decomposition temperature	> 170 °C
pH	2.2 (0.1 N aqueous solution)
Kinematic viscosity	Not applicable (solid)
Solubility	ca. 60 g/100 ml of water (25 °C)
Partition coefficient n-octanol/water	log Pow: -1.72 (at 20 °C)
Vapour pressure	< 0.01 hPa at 20 °C
Density and/or relative density	1.665 g/cm3
Relative vapour density	Not applicable (non-volatile solid)
Particle characteristics	Crystalline powder

SECTION 10: Stability and reactivity

Reactivity	The solution in water is a medium strong acid; pure material is moisture sensitive (slow hydrolysis); water soluble
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Decomposes above 175 °C emitting acrid smoke and fumes; reacts with oxidants and bases; attacks metals; potentially explosive reaction with metal nitrates
Conditions to avoid	Heat, flame, ignition sources, dust and incompatibles
Incompatible materials	Metal nitrous compounds, copper, zinc, aluminium
Hazardous decomposition products	Carbon dioxide and carbon monoxide may form when heated to decomposition

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 Oral - Rat - 3,000 mg/kg LD50 Dermal - Rat - > 2,000 mg/kg
Skin corrosion/irritation	Skin - Rabbit: Slight irritation
Serious eye damage/irritation	Eyes - Rabbit: Causes serious eye irritation (OECD 405)

Respiratory or skin sensitization	Not classified (based on available data)
Germ cell mutagenicity	Ames test (Salmonella typhimurium): negative
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by
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	Toxicity to fish: LC50 - Leuciscus idus (golden orfe) - 440 mg/l - 48 h Toxicity to daphnia: EC50 - Daphnia magna (Water flea) - 120 mg/l - 24 h
Persistence and degradability	Readily biodegradable (OECD 301).
Bioaccumulative potential	No bioaccumulation potential (log Pow = -1.72).
Mobility in soil	Highly mobile in soil (very soluble in water).
Other adverse effects	None known

SECTION 13: Disposal considerations

Product disposal methods	Recycling is preferred to disposal or incineration. Can be landfilled or incinerated according to local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated
Transport hazard class(es)	Not regulated
Packing group	Not regulated
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: Listed (201-069-1) TSCA: Listed IECSC: Listed

SECTION 16: Other information

Full text of H-Statements	H319 Causes serious eye irritation
Revision date	2026-10-29
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.