



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

SAFETY DATA SHEET (SDS)

Citric Acid Anhydrous *SDS*

REV 3.1
29 JULY 2026
GHS REV.11 (2025)

CAS 77-92-9 EC 201-069-1 SIGNAL WORD **ANGER**

GHS07

Harmful / Irritant

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Name	Citric Acid Anhydrous
Product Type	Citric Acid — industrial chemical
Chemical Family	Carboxylic Acid / Hydroxy Acid
CAS No.	77-92-9
EC No.	201-069-1
Intended Use	Industrial / professional use as described on the SPC product page.
Restrictions on Use	Industrial / professional use only. Confirm suitability for final application before use.
Supplier	Supreme Petro Chemicals
Address	No. 145, 1st Floor, Raja Muthiah Road, Periyamet, Chennai – 600003, India
Emergency Contact	Sanketh — +91 86087 80096 · Sudarshan — +91 81979 47045
Email	admin@supremepetrochemicals.com
Product Page	https://www.supremepetrochemicals.com/products/citric-acid-anhydrous
SDS Revision	July 2026
SDS Version	3.1

SECTION 2 HAZARD IDENTIFICATION

Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); STOT SE 3 (H335) – GHS/CLP classification.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

GHS Classification	Skin Irritation Category 2; Eye Irritation Category 2; Specific Target Organ Toxicity — Single Exposure Category 3 (Respiratory Tract Irritation)
Signal Word	WARNING
GHS Pictograms	GHS07 — Harmful / Irritant
Other GHS Hazard Classes	Not classified for unlisted hazard classes based on reviewed source data.

HAZARD STATEMENTS

- H315 — Causes skin irritation
- H319 — Causes serious eye irritation
- H335 — May cause respiratory irritation

PRECAUTIONARY — PREVENTION

- P260 — Do not breathe dust / fume / gas / mist / vapours / spray.
- P264 — Wash hands thoroughly after handling.
- P271 — Use only outdoors or in a well-ventilated area.
- P272 — Contaminated work clothing should not be allowed out of the workplace.
- P273 — Avoid release to the environment.
- P280 — Wear protective gloves / eye protection / face protection.

PRECAUTIONARY — RESPONSE / STORAGE / DISPOSAL

- P302+P352 — IF ON SKIN: Wash with plenty of water.
- P304+P340 — IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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.
- P321 — Specific treatment: see label / SDS.
- P332+P313 — If skin irritation occurs: Get medical advice / attention.
- P337+P313 — If eye irritation persists: Get medical advice / attention.
- P362+P364 — Take off contaminated clothing and wash it before reuse.
- P403+P233 — Store in a well-ventilated place. Keep container tightly closed.
- P405 — Store locked up.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

- P501 – Dispose of contents / container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	EC NO.	% W/W	GHS CLASSIFICATION
Citric Acid Anhydrous	77-92-9	201-069-100 1		Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); STOT SE 3 (H335)

Percentages are by weight. Full text of H-statements listed in Section 16.

SECTION 4 FIRST AID MEASURES

Inhalation	Remove person to fresh air. Keep at rest in a position comfortable for breathing. If symptoms persist, seek medical attention.
Skin Contact	Remove contaminated clothing. Wash affected skin thoroughly with soap and water for at least 15 minutes. Seek medical attention if irritation or symptoms persist.
Eye Contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Give water to drink if conscious. Seek medical advice.
Note to Physician	Treat symptomatically based on exposure route and product hazards. No specific antidote known.

SECTION 5 FIREFIGHTING MEASURES

Suitable Extinguishing Media	Water spray, dry chemical powder, carbon dioxide (CO ₂), foam. Use extinguishing media appropriate to surrounding fire conditions.
Unsuitable Media	Do not direct a high-pressure water jet onto burning material as this may spread the fire.
Specific Hazards	Citric acid is combustible. Dust or fine particulate may form combustible or irritating atmospheres. Avoid dust clouds and ignition sources. Containers may rupture or bulge when heated.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

Thermal decomposition may produce carbon oxides and irritating fumes.

Protective Equipment	Wear full protective clothing and self-contained breathing apparatus (SCBA). Wear EN 469 / NFPA chemical protective suit.
Special Procedures	Evacuate non-essential personnel. Fight fire from a safe distance. Prevent contaminated fire-water run-off from entering drains and waterways. Cool adjacent containers with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions	Isolate area. Evacuate non-essential personnel. Use PPE as described in Section 8. Avoid raising dust. Do not allow contact with skin or eyes.
Environmental Precautions	Prevent entry into drains, sewers, soil and watercourses. Inform local authorities if significant quantities are released to the environment.
Containment / Clean-up	Collect material carefully using non-sparking tools into labelled, compatible, sealed containers for disposal through an approved waste contractor. Avoid generating dust. Vacuum or wet-sweep; do not dry-sweep.
Reference to Sections	See Section 8 for PPE, Section 13 for disposal, and Section 15 for regulatory information.

SECTION 7 HANDLING AND STORAGE

Handling Precautions	Use adequate local exhaust ventilation to control dust. Avoid contact with skin, eyes and clothing. Avoid inhalation of dust. Keep container tightly closed when not in use.
Hygiene	Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using. Remove contaminated clothing before reuse.
Storage Conditions	Store in original, tightly closed, compatible containers. Keep in a cool, dry, well-ventilated area, away from direct sunlight.
Storage Temperature	Ambient temperature (15–25 °C recommended). Protect from moisture.
Incompatible Materials	Strong oxidising agents (nitric acid, permanganates, peroxides, chlorine). Concentrated acids and halogens. Aluminium chloride under elevated temperature.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

Segregation	Segregate from food, drink, animal feed, oxidising agents, and incompatible chemicals. Store in a dedicated area.
-------------	---

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit	No specific OSHA PEL or ACGIH TLV established for citric acid anhydrous (CAS 77-92-9). Apply ALARA / good industrial hygiene principles. Verify current local OEL (India MSIHC / EU IOELV / NIOSH REL) before use.
Engineering Controls	Use local exhaust ventilation (LEV) or process enclosure to control dust generation. Provide general dilution ventilation. Use explosion-proof ventilation equipment where applicable.
Respiratory Protection	If ventilation is inadequate and OEL may be exceeded, use a NIOSH-approved / EN 149 respirator with a P95 / P100 or FFP2 / FFP3 particulate filter. Use SCBA for emergencies or confined-space entry.
Hand / Eye / Skin	Hands: chemical-resistant gloves (nitrile, butyl or neoprene; select breakthrough time appropriate to task). Eyes: EN 166 / ANSI Z87.1 chemical splash goggles; add face shield where splash risk exists. Body: chemical-resistant apron / clothing and safety footwear. Provide eyewash station and safety shower at workplace.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White crystalline solid (powder or granules); odourless.
Odour	Odourless
Odour Threshold	Not established
pH	2.2 (1% aqueous solution at 25 °C). Not applicable to dry solid form.
Melting / Freezing Point	153 °C (307 °F) (NTP, 1992) [anhydrous form]
Boiling Point / Range	Decomposes above ~175 °C; does not exhibit a true boiling point at atmospheric pressure (NTP, 1992)
Flash Point	Not applicable — solid not classified as flammable under GHS criteria. (Source listed 'Decomposes' under this field in error; decomposition data re-mapped to Boiling Point.)
Auto-ignition Temperature	~1010 °C (1850 °F) (USCG, 1999)
Flammability Limits	Not established; citric acid dust may form combustible suspensions — apply dust explosion precautions.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

Vapour Pressure	Negligible at ambient temperature (solid). See PubChem experimental properties for vapour pressure data.
Vapour Density (air = 1)	See PubChem experimental properties.
Relative Density	1.54 at 20 °C (68 °F) (USCG, 1999) — denser than water; will sink.
Solubility in Water	≥100 mg/mL at 22 °C (NTP, 1992); very soluble in water. Freely soluble in ethanol; soluble in ether.
Log Pow (Partition Coeff.)	-1.64 (mean of reviewed experimental values)
Evaporation Rate	Not applicable — solid.
Viscosity	2.549 cP (30% aqueous solution at 20 °C)
VOC Content	Negligible — assess under applicable regional VOC regulations if formulating a solution.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage and handling conditions.
Conditions to Avoid	Heat above 175 °C (decomposition), ignition sources, dust cloud generation, contamination with incompatible materials, and moisture ingress.
Incompatible Materials	Strong oxidising agents (nitric acid, chlorine, permanganates, peroxides). Concentrated acids and halogens. Reactive with aluminium chloride (AlCl ₃) under elevated temperature — not a concern under ambient blending or storage conditions.
Hazardous Decomposition	Thermal decomposition may produce carbon monoxide (CO), carbon dioxide (CO ₂), and irritating or toxic organic vapours / fumes.
Hazardous Reactions	No hazardous polymerisation. No dangerous reactions under normal storage and handling conditions unless noted by product-specific reactivity data.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD ₅₀ (rat, oral): 3,000 mg/kg (literature value; citric acid is of low acute oral toxicity). GHS classification: not classified for acute oral toxicity.
Acute Dermal Toxicity	No specific LD ₅₀ data confirmed from reviewed sources. Classified Skin Irrit. 2 (H315) based on irritation potential. Supplier / test data required for numeric endpoint.



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

Acute Inhalation Toxicity	No specific LC ₅₀ data confirmed from reviewed sources. Classified STOT SE 3 (H335) – respiratory irritation from dust inhalation. Supplier / test data required.
Skin Irritation	Classified: Skin Irrit. 2 – H315 Causes skin irritation. Repeated or prolonged contact may cause dermatitis.
Eye Irritation	Classified: Eye Irrit. 2 – H319 Causes serious eye irritation.
Sensitisation	Not classified as a skin or respiratory sensitiser based on reviewed data.
Carcinogenicity	Not listed as a carcinogen by IARC, NTP, or OSHA. Not classified.
Mutagenicity	Not classified as a mutagen based on reviewed data. Supplier confirmation recommended for regulatory submissions.

SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity	No acute aquatic classification identified in Section 2 from reviewed data. Literature reports low acute toxicity to aquatic organisms. Avoid uncontrolled release to water bodies.
Persistence / Degradability	Citric acid is readily biodegradable. BOD/COD data available from supplier or ECHA dossier; obtain confirmation if required for registration or export.
Bioaccumulation	Log Kow = -1.64; bioaccumulation in aquatic organisms is unlikely. No BCF data available from reviewed public sources.
Mobility in Soil	Highly water-soluble; mobile in soil and groundwater. Prevent release to soil and drains.
Other Adverse Effects	Avoid uncontrolled release to the environment. Manage releases and waste under applicable local environmental regulations.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste from Product	Dispose of contents through an authorised waste contractor in accordance with local regulations. Do not pour liquid down drains or into watercourses without treatment.
Contaminated Packaging	Empty containers may retain residues; handle as potentially hazardous until thoroughly cleaned or disposed of through authorised channels.
Indian Regulations	Follow Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (amended) and applicable



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

State Pollution Control Board requirements. Assign waste code per actual process and local regulation.

SECTION 14 TRANSPORT INFORMATION

PARAMETER	UN / ADR (ROAD)	IMDG (SEA)	IATA (AIR)
UN Number	Not regulated	Not regulated	Not regulated
Proper Shipping Name	Not regulated	Not regulated	Not regulated
Class	Not regulated	Not regulated	Not regulated
Packing Group	Not regulated	Not regulated	Not regulated
Marine Pollutant	No	No	—

Citric acid anhydrous does not have a UN transport entry and is not regulated as dangerous goods under ADR, IMDG, or IATA DGR based on reviewed public references. Verify current carrier rules and local requirements before shipment. Use approved, compatible UN-certified containers for international transport. Label with product name, supplier details, and hazard information per Section 2.

SECTION 15 REGULATORY INFORMATION

EU / REACH / CLP	Observe REACH (EC No. 1907/2006) and CLP (EC No. 1272/2008) requirements where applicable. Classified and labelled according to GHS/CLP classification in Section 2. Observe applicable workplace, VOC, and environmental directives.
OSHA (USA)	Prepared in OSHA HCS / HazCom 2012 (29 CFR 1910.1200) aligned 16-section SDS format. Verify TSCA inventory / SNUR status before US import or distribution.
India	Observe applicable requirements under the Manufacture, Storage and Import of Hazardous Chemical (MSIHC) Rules, 1989 (amended); Factories Act; Environment Protection Act; Hazardous Waste Rules; and applicable State SPCB orders.
Canada (WHMIS / HPR)	Classify and label under WHMIS 2015 / HPR using Section 2 classification. Canadian sale may require bilingual SDS / label and ingredient disclosure.
China (GB Standards)	Apply GB/T SDS and classification requirements where product is marketed in China.
Australia (AICS)	Check AICS inventory status before export or import.
Other Jurisdictions	Observe applicable GHS-aligned local requirements. Final market placement requires confirmation of inventory status, local OELs,



SUPREME PETRO CHEMICALS

IMPORTER & DISTRIBUTOR OF INDUSTRIAL CHEMICALS ·
SINCE 1997

No. 145, 1st Floor, Raja Muthiah Road,
Periyamet, Chennai – 600003, India
+91 86087 80096 · +91 81979 47045
admin@supremepetrochemicals.com

transport class, waste code, and restrictions.

SECTION 16 OTHER INFORMATION

Prepared By	Supreme Petro Chemicals — Technical Department
SDS Standard	UN GHS Rev.11 (2025); OSHA HCS/HazCom; EU CLP/REACH Annex II; Canada WHMIS/HPR — 16-section format
Revision Date	24 June 2026
Version	3.0 (supersedes prior issues)
Key Sources	SPC product page; UN GHS Rev.11 Annex 4; OSHA HCS Appendix D; EU REACH Annex II / CLP; Canada WHMIS/HPR; PubChem CID 311 (Citric Acid); ECHA dossier; NIOSH/OSHA; USCG CHRIS; NTP Chemical Repository; CAMEO Chemicals. Accessed June 2026.
Disclaimer	Information is given in good faith and believed accurate at issue. It does not constitute a specification or guarantee; the user is responsible for safe use, handling and compliance with all applicable laws and regulations. Supreme Petro Chemicals shall not be liable for any loss, injury, or damage resulting from reliance on this information.

FULL TEXT OF H-STATEMENTS

- H315 — Causes skin irritation
- H319 — Causes serious eye irritation
- H335 — May cause respiratory irritation