

Material Safety Data Sheet (MSDS / SDS)

Glacial Acetic Acid - Industrial Grade

SECTION 1: Identification

Product Name	Glacial Acetic Acid (Ethanoic Acid), Industrial Grade
Synonyms	Glacial Acetic Acid, GAA, Ethanoic Acid, Acetic Acid (Glacial)
CAS No.	64-19-7
Recommended Use	Industrial feedstock for VAM, acetic anhydride, ester synthesis, textile processing and industrial cleaning
Manufacturer / Supplier	Ochnology Solution Pvt. Ltd., B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India - 248001
Telephone	+91 9286823642/43
Email	projects@ochnology.com, bd@ochnology.com

SECTION 2: Hazard(s) Identification

GHS Classification: Flammable Liquid Category 3 (H226); Skin Corrosion Category 1A (H314 - Causes severe skin burns and eye damage)

Signal Word: Danger

Hazard Statements:

- H226 - Flammable liquid and vapour
- H314 - Causes severe skin burns and eye damage

Precautionary Statements:

- P210 - Keep away from heat, hot surfaces, sparks, open flames - No smoking
- P233 - Keep container tightly closed
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof electrical/ventilating/lighting equipment
- P260 - Do not breathe vapours/mist
- P264 - Wash hands thoroughly after handling
- P280 - Wear protective gloves/eye protection/face protection

- P301+P330+P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303+P361+P353 – IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304+P340 – IF INHALED: Remove person to fresh air and keep at rest in a position 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
- P310 – Immediately call a POISON CENTER/doctor
- P403+P235 – Store in a well-ventilated place. Keep cool

SECTION 3: Composition / Information on Ingredients

Component	CAS No.	Concentration (w/w)
Acetic Acid	64-19-7	Min. 99.5%
Water (residual)	7732-18-5	< 0.5%

SECTION 4: First-Aid Measures

Eye Contact	Rinse immediately and continuously with plenty of water for at least 20–30 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Get immediate medical attention – risk of severe and permanent eye damage.
Skin Contact	Remove contaminated clothing immediately. Flush affected area with plenty of water for at least 20 minutes. Get medical attention immediately – severe chemical burns are possible.
Inhalation	Move to fresh air immediately. Vapours are corrosive to the respiratory tract. If breathing is difficult, give oxygen if trained to do so. Seek medical attention immediately.
Ingestion	Do NOT induce vomiting. Rinse mouth with water. Do not give anything by mouth if the person is unconscious. Seek immediate medical attention – risk of severe internal burns.

SECTION 5: Fire-Fighting Measures

- Flammable liquid (flash point $\approx$ 39–40°C) – keep away from heat, sparks and open flame
- Suitable extinguishing media: dry chemical, CO₂, alcohol-resistant foam (acetic acid is water-miscible), water spray/fog
- Vapours can form explosive mixtures with air
- Fire-fighters should wear SCBA and full acid-resistant protective equipment given the combined flammability and corrosivity hazard

SECTION 6: Accidental Release Measures

- Eliminate all ignition sources; ventilate the area – vapours are corrosive to the respiratory tract
- Contain the spill; neutralise with soda ash or lime under controlled conditions by trained personnel where appropriate
- Prevent entry into drains, sewers or waterways
- Wear full chemical-resistant PPE (acid-resistant suit, gloves, goggles/face shield) during clean-up

SECTION 7: Handling and Storage

- Avoid all contact with skin and eyes; avoid breathing vapours; use only in a well-ventilated area
- Keep away from heat, sparks, open flame and other ignition sources
- Use explosion-proof electrical equipment where vapours may accumulate
- Store in corrosion-resistant containers (stainless steel or suitably lined) – acetic acid corrodes many common metals
- Keep away from strong oxidising agents and strong bases – violent, highly exothermic reactions can occur

SECTION 8: Exposure Controls / Personal Protection

Occupational Exposure Limits	OSHA PEL / ACGIH TLV: 10 ppm (8-hr TWA); ACGIH STEL: 15 ppm, for acetic acid
Engineering Controls	Local exhaust ventilation and explosion-proof equipment where vapours may accumulate
Eye/Face Protection	Chemical splash goggles and face shield required – this product

Hand Protection	causes severe eye damage Acid-resistant gloves (neoprene or butyl rubber) required
Respiratory Protection	Acid-gas cartridge respirator or SCBA required if ventilation is inadequate or vapour concentrations are elevated

SECTION 9: Physical and Chemical Properties

Property	Unit	Value
Appearance	–	Clear, colourless liquid (solidifies to ice-like crystals below $\approx 16.7^{\circ}\text{C}$)
Odour	–	Strong, pungent, vinegar-like odour
Boiling Point	$^{\circ}\text{C}$	≈ 118
Flash Point (Closed Cup)	$^{\circ}\text{C}$	$\approx 39 - 40$
Freezing/Melting Point	$^{\circ}\text{C}$	≈ 16.7
Density	g/cm^3	≈ 1.049
Solubility in Water	–	Fully miscible
Autoignition Temperature	$^{\circ}\text{C}$	≈ 465

SECTION 10: Stability and Reactivity

- Stable under normal conditions of storage, handling and use
- Flammable vapours can form explosive mixtures with air
- Violent, highly exothermic reaction with strong bases (neutralisation) and strong oxidising agents
- Corrosive to many common metals (except stainless steel and certain resistant alloys); reaction with some metals can generate flammable hydrogen gas over time

SECTION 11: Toxicological Information

- Corrosive – causes severe skin burns and eye damage on direct contact with the concentrated (glacial) form
- Vapours are corrosive/irritating to the respiratory tract and can cause chemical burns to the airways at high concentration
- Ingestion causes severe burns to the mouth, throat, oesophagus and stomach
- Repeated low-level vapour exposure has been associated with dental erosion and chronic respiratory irritation in occupational settings
- Not classified as carcinogenic, mutagenic, or toxic to reproduction based on available information – corrosivity is the primary, well-established hazard

SECTION 12: Ecological Information

- Moderately toxic to aquatic organisms, primarily through pH shock given its acidity
- Readily biodegradable; not expected to bioaccumulate
- Must not be discharged to waterways without neutralisation

SECTION 13: Disposal Considerations

- Neutralise (e.g., with soda ash or lime, under controlled conditions by trained personnel) before disposal
- Dispose of as hazardous waste in accordance with local, state and national regulations
- Do not discharge untreated to sewers or waterways

SECTION 14: Transport Information

UN Number	UN 2789
Proper Shipping Name	ACETIC ACID, GLACIAL
Transport Hazard Class	8 (Corrosive), Subsidiary Risk 3 (Flammable)

Packing Group II

Environmental Hazards Avoid release to aquatic environment – acidic

SECTION 15: Regulatory Information

- Classified as a Dangerous Good (Class 8 Corrosive with Subsidiary Risk 3 Flammable, UN 2789) under IMDG/ADR/IATA – requires DG documentation, corrosion/flame-resistant packaging and DG-compliant freight booking
- Widely listed on major chemical inventories (TSCA, REACH, ECL, etc.) as an existing/registered substance
- Food-grade or pharmaceutical-grade acetic acid, if required, must be separately certified against the applicable food/pharmacopeia standard – this SDS covers the industrial/technical grade only
- Buyers/importers should confirm import permits and corrosive/flammable-material handling regulations applicable to their specific jurisdiction

SECTION 16: Other Information

Revision Date: 18 July 2026

This SDS has been compiled based on general industry data and knowledge for Glacial Acetic Acid products of this type as commercially supplied. Glacial acetic acid is a genuinely corrosive and flammable Dangerous Good – this document is intended as a general handling and safety guide only and does not replace a batch-specific SDS from the manufacturing mill or a professional Dangerous Goods compliance review.

Disclaimer: This Safety Data Sheet is prepared based on our current knowledge and information believed to be reliable for the product as typically supplied, and is intended as a general guide only. It does not constitute a warranty of any specific properties. Ochnology Solution Pvt. Ltd. reserves the right to modify this document without prior notice. Buyers/users are responsible for determining the suitability of this information for their own use, handling, and disposal practices, and for compliance with applicable laws and regulations in their jurisdiction.