

Safety Data Sheet: Glacial Acetic Acid

1. Identification

Product	Glacial Acetic Acid; CAS 64-19-7; EC 200-580-7
Use	Professional ingredient and formulation development.
Company	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Address	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China
Telephone / email	+86-21-54265599 / sales@zxchem.com.cn
Emergency contact	ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.
Scope	Reference safety information for Glacial Acetic Acid. The reference composition, concentration and supply-grade differences are described in Section 3. This document does not certify the composition or transport status of a specific delivered batch or a different formulation.

2. Hazards Identification

Classification	Flammable liquids Category 3; skin corrosion Category 1A; serious eye damage Category 1.
Signal word / symbols	Danger; GHS02, GHS05
Hazard statements	H226: flammable liquid and vapour. H314: causes severe skin burns and eye damage.
Prevention	Use adequate ventilation; avoid inhaling vapour or mist. Prevent skin and eye contact. Wear suitable chemical-resistant gloves and eye protection. Wash after handling; keep food and drink out of the work area. Keep away from heat, sparks and flames. Use grounded equipment and control static discharge.
Response	After exposure, stop work and seek medical advice. For severe exposure obtain urgent medical care. Rinse contaminated skin or eyes with water; move an inhalation casualty to fresh air.
Environment	Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.



3. Composition / Information on Ingredients

Reference ingredient	Acetic acid, CAS 64-19-7, EC 200-580-7. Supply assay ≥99.8%; glacial substance reference ≥90–100%. Reference percentage is not a delivered-batch certificate.
Supply grade	Assay ≥99.8%
Applicability	The cited concentration or purity describes the reference material. It is not a certificate of analysis for the delivered batch; different solvents or dilutions require the matching supplier safety document.

4. First-Aid Measures

General	Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant.
Inhalation	Move to fresh air and keep the person comfortable. Seek medical care for breathing difficulty or persistent symptoms. Avoid exposing rescuers to mist.
Skin	Remove contaminated clothing and rinse skin thoroughly with water. Obtain urgent treatment for chemical burns.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Obtain urgent medical care.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain emergency medical attention.
Effects / treatment	Severe burns to skin and eyes; vapour can irritate or damage the respiratory tract. Ingestion can cause corrosive injury. Significant exposure requires urgent medical attention. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool exposed containers from a safe distance and prevent contaminated runoff. Firefighters need protective clothing and self-contained breathing apparatus.
Hazards	Flammable vapour can form explosive mixtures when heated. Fire can release carbon monoxide, carbon dioxide and irritating vapours.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personnel	Isolate the spill and provide ventilation. Use chemical-resistant gloves and eye protection; avoid contact and mist exposure.
Environment	Contain the release and protect drains and waterways. Report significant environmental contamination to the responsible authority.
Cleanup	Stop the leak if safe. Absorb liquid with a compatible inert material and collect in closed labelled containers. Do not wash into drains.

7. Handling and Storage

Handling	Use closed transfer and effective local ventilation. Wear acid-resistant gloves, splash goggles, face protection and suitable protective clothing. Control ignition sources and static discharge; maintain accessible eyewash and emergency washing facilities.
Storage	Store tightly closed in compatible acid-resistant containers in a cool, dry, well-ventilated area. Keep away from heat, sparks, flames, strong oxidizers, strong bases and incompatible metals. Provide spill containment.
Incompatibilities	Strong oxidizers, peroxides, strong alkalis, reactive metals and other incompatible reactive chemicals. Some metals can release flammable hydrogen.
Specific use	Evaluate compatibility and appropriate operating conditions in the complete formulation before industrial use.

8. Exposure Controls / Personal Protection

Exposure limits	Reference workplace limits include OSHA 8-hour TWA 10 ppm (25 mg/m ³) and NIOSH short-term 15 ppm (37 mg/m ³). Apply the current limits required for the actual workplace and jurisdiction.
Engineering controls	Use local extraction where mist can be generated. Maintain accessible eyewash and emergency washing facilities.
Personal protection	Wear chemical-resistant gloves selected for the task, suitable protective clothing and splash goggles. Add face protection for splash-prone tasks.
Respiratory protection	Use a properly selected respirator under a respiratory-protection program where engineering controls do not adequately limit airborne exposure.
Hygiene	Wash after handling, remove contaminated clothing promptly and do not eat, drink or smoke in the work area.

9. Physical and Chemical Properties

Appearance	Colourless liquid
Formula / molecular weight	C ₂ H ₄ O ₂ / 60.05 g/mol
Freezing point	16.2°C
Boiling range	117–118°C
Flash point, closed cup	39°C
Density, 25°C	1.049 g/cm ³
pH, 50 g/L at 20°C	2.5
Other properties	Product-specific values for odor threshold, vapor pressure, partition coefficient, autoignition temperature and viscosity are not supplied by the selected reference set. No values are inferred.

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	Strong oxidizers, peroxides, strong alkalis, reactive metals and other incompatible reactive chemicals. Some metals can release flammable hydrogen.
Decomposition	Flammable vapour can form explosive mixtures when heated. Fire can release carbon monoxide, carbon dioxide and irritating vapours.

11. Toxicological Information

Exposure effects	Severe burns to skin and eyes; vapour can irritate or damage the respiratory tract. Ingestion can cause corrosive injury. Significant exposure requires urgent medical attention.
Reference classification	Flammable liquids Category 3; skin corrosion Category 1A; serious eye damage Category 1.
Data limits	Oral rat LD ₅₀ reference 3,310 mg/kg. Corrosive skin and eye effects are the principal acute hazard. Negative mutagenicity test results are reported in the substance reference; no reproductive or sensitization endpoint is assigned to the supplied batch.

12. Ecological Information

Environmental effects	The substance reference reports fish 96 h LC50 and Daphnia 48 h EC50 above 1,000 mg/L and ready biodegradation. Large releases can alter water pH. Prevent discharge; these results do not permit uncontrolled release.
Controls	Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.
Assessment	No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.

13. Disposal Considerations

Product	Collect surplus product and contaminated cleanup material for disposal by an authorized chemical-waste contractor in accordance with local requirements.
Packaging	Containers may retain product residues. Do not reuse contaminated packaging without an approved cleaning process; use an authorized disposal route.

14. Transport Information

Classification	Class 8 — Corrosive; subsidiary risk 3
UN number	UN 2789
Shipping name	ACETIC ACID, GLACIAL
Class / packing group	ADR / RID / IMDG / IATA: Class 8, subsidiary risk 3, packing group II. IMDG EmS F-E, S-C.
Transport precautions	Protect packaging and closures from damage, secure loads and prevent releases. This reference is not a shipping declaration for a specific consignment.

15. Regulatory Information

Identity	Glacial Acetic Acid; CAS 64-19-7; EC 200-580-7
HS reference	291521; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish authorization for a finished food, flavour or other formulation.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H226: flammable liquid and vapour. H314: causes severe skin burns and eye damage.
Limitations	Prepared as reference safety information for the identified material. It is not a batch analytical certificate or safety assessment of a different solvent-containing formulation.
Revision	2026.1; prepared 2026-10-06. Customer-document branding and title corrected; technical safety data retained.
Document scope	Reference safety information for the material and grade described in Sections 1 and 3. Different concentrations, solvents or formulations require the applicable safety information. This is not a batch analytical certificate.

Revision: 2026.1 | Revision date: 2026-10-06