东营源升化工有限公司
Dongying Yuansheng Chemical Co., Ltd

SAFETY DATA SHEET (SDS / MSDS)

Acetic acid, glacial | CAS No. 64-19-7 | Revision: 2026-09-22

SECTION 1: Identification

Product identifier: Acetic acid, glacial

Synonyms: Ethanoic acid; Vinegar acid (pure) **Formula:** C2H4O2

CAS No.: 64-19-7 **EC No.:** 200-580-7 **Molecular weight:** 60.05 g/mol

Recommended use: Vinyl acetate, acetate esters, solvents, food acidulant, textile dyeing, pharmaceutical.

Supplier: Dongying Yuansheng Chemical Co., Ltd, Dongying, Shandong Province, P.R. China.

Emergency telephone: +86-546-XXXXXXX (business hours); for medical emergency contact local poison control centre.

SECTION 2: Hazard(s) identification

GHS classification: Flam. Liq. 3; Skin Corr. 1A; Eye Dam. 1.

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/sparks/open flames; P280 Wear gloves/eye protection/face shield; P303+P361+P353 IF ON SKIN rinse; P305+P351+P338 IF IN EYES rinse; P310 Call POISON CENTER/doctor.

Additional hazards: Corrosive and flammable. Freezes near 16.6 °C ('glacial'); expands on freezing. Vapour irritating.

SECTION 3: Composition / information on ingredients

Substance. The table below lists the hazardous component. Ethanoic acid; Vinegar acid (pure) is the product itself.

Component	CAS No.	EC No.	Concentration (w/w)
Acetic acid, glacial	64-19-7	200-580-7	Glacial grade (≥ 99.5%)

SECTION 4: First-aid measures

Inhalation: Move victim to fresh air; keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical attention immediately.

Skin contact: Take off contaminated clothing immediately. Rinse skin with plenty of water for at least 15 minutes. Seek medical attention immediately.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Seek medical attention immediately.

Ingestion: Rinse mouth. Do NOT induce vomiting. Give water/milk if conscious. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

Most important symptoms/effects: Causes severe burns to skin and eyes. Vapour irritates respiratory tract.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Carbon dioxide (CO2), dry chemical powder, alcohol-resistant foam. Use water spray to cool containers and protect personnel.

Hazards from the substance: Vapours are heavier than air and may travel along the ground to an ignition source. Vapour-air mixtures are explosive. On heating, hazardous decomposition products may be formed.

Advice for fire-fighters: Wear self-contained breathing apparatus (SCBA) and full protective clothing. Do not use a direct water jet (may spread fire). Collect contaminated fire water separately.

SECTION 6: Accidental release measures

Personal precautions: Ensure adequate ventilation. Wear suitable PPE (Section 8). Avoid inhalation and contact with skin/eyes. Remove ignition sources if flammable.

Environmental precautions: Do not allow product to enter drains, surface water, groundwater or soil.

Methods for cleaning up: Ventilate the area. Absorb with inert material (sand, earth, vermiculite) or neutralize as appropriate. Collect in labelled, sealed containers for disposal. Wash remainder with water. Prevent entry into waterways.

SECTION 7: Handling and storage

Handling: Use only in well-ventilated areas. Do not breathe vapour/mist/dust. Wear PPE. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks and open flame; use explosion-proof electrical equipment. Keep away from incompatible materials.

Storage: Store in tightly closed containers in a cool, dry, well-ventilated place. Keep away from direct sunlight and heat. Keep separated from oxidizers, acids/bases and incompatible materials. Use corrosive-resistant equipment.

SECTION 8: Exposure controls / personal protection

Occupational exposure limits: OSHA PEL 10 ppm; ACGIH TLV 10 ppm (ceiling).

Engineering controls: Use local exhaust ventilation and/or process enclosure. Emergency eye-wash and safety shower must be available close to the work station.

Respiratory protection: Use approved respirator (organic-vapour / ABEK-P3 filter as appropriate; SCBA for high concentrations or enclosed spaces).

Hand protection: Chemical-resistant gloves (neoprene, PVC, nitrile or fluorinated rubber - check permeation data).

Eye protection: Tightly sealed chemical safety goggles; face shield when risk of splashing.

Skin and body protection: Acid/chemical-resistant protective suit, apron and boots.

Hygiene measures: Do not eat, drink or smoke during work. Wash hands before breaks and at end of work. Remove contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance	Colourless liquid	**Odour**	Pungent vinegar
Density (20°C)	1.05 g/cm³	**Melting point**	16.6 °C
Boiling point	118 °C	**Flash point**	39 °C
Solubility in water	Miscible	**Vapour density**	2.1 (air=1)
Molecular weight	60.05 g/mol	**Autoignition**	465 °C

SECTION 10: Stability and reactivity

Reactivity / chemical stability: Stable under recommended storage and handling conditions.

Incompatible materials: Strong oxidizers, strong bases (bases exothermic), chlorates, nitrates..

Hazardous reactions: Reacts violently or releases dangerous products with the incompatible materials listed above. Do not mix without assessment.

Conditions to avoid: Heat, direct sunlight, moisture and contact with incompatible materials.

Hazardous decomposition products: Thermal decomposition may release toxic/corrosive fumes (e.g. oxides of carbon, nitrogen, sulfur, hydrogen halides).

SECTION 11: Toxicological information

Acute / chronic toxicity: Causes severe burns to skin and eyes. Vapour irritates respiratory tract.

Routes of exposure: Inhalation, skin/eye contact, ingestion.

Other: See Section 2 for classification. Data above is indicative; refer to authoritative databases (e.g. ECHA, OECD SIDS) for exact values.

SECTION 12: Ecological information

Ecototoxicity: Readily biodegradable; harmful to aquatic organisms at low pH.

Persistence / degradability: See product data. Do not allow undiluted product to reach groundwater, watercourses or sewage.

Other adverse effects: Avoid release to the environment. Dispose of in accordance with local/national regulations.

SECTION 13: Disposal considerations

Product: Dispose of as hazardous waste in accordance with local/national regulations. Do not discharge to sewer. Neutralize/treat as appropriate or hand over to a licensed hazardous-waste contractor.

Contaminated packaging: Dispose of as unused product. Empty containers must be properly drained and handed to an approved disposal/recycling contractor. Do not pressurise, cut, weld or braze used containers.

SECTION 14: Transport information

UN number: UN 2789.

Proper shipping name: ACETIC ACID, GLACIAL (> 80%).

Transport hazard class(es): Class 8.

Packing group: II.

Packaging / labels: Pack in approved containers for the hazard class; apply required hazard labels.

Environmental hazards: Refer to classification (Sections 2, 12). ADR/RID/IMDG/IATA regulations apply.

Special precautions: Ensure containers are tightly closed and upright. Keep away from foodstuffs and incompatible materials.

SECTION 15: Regulatory information

National inventories: Listed in the China Inventory of Existing Chemical Substances (IECSC); EINECS/ELINCS as applicable.

Classification: Classified and labelled according to the UN GHS (Rev. 9) and PRC GB 30000 series / GB 13690; Work Safety Law of the PRC; Hazardous Chemicals Safety Management Regulations.

Chemical Safety Assessment: A Chemical Safety Assessment has not been performed for this product by the supplier.

SECTION 16: Other information

Revision date: 2026-09-22. **Version:** 1.0.

Abbreviations: CAS, EC, GHS, SDS/MSDS, LD50/LC50, PEL/TLV, SCBA, STOT, UN, IECSC, ADR, IMDG, IATA.

Disclaimer: The information in this SDS is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. It is intended only as a guide for safe handling, use, storage, transport and disposal. Users are responsible for applying this information in accordance with their specific conditions and for compliance with all applicable laws and regulations.