

Safety Data Sheet **ACETIC ACID**

SDS no. VJ8X7S33 • Version 1.0 • Date of issue: 2025-11-11

SECTION 1: Identification

GHS Product identifier

Product name ACETIC ACID

Other means of identification

Product Product Code

ACETIC ACID 90% FG	AP006
ACETIC ACID Glacial TG	AT009
ACETIC ACID Glacial AR	AA009
ACETIC ACID Glacial LR	AL009
ACETIC ACID Anhydrous AR	AA221
Ethanoic acid, Vinegar acid, Methanecarboxylic acid	

Recommended use of the chemical and restrictions on use

Manufacture of acetic anhydride, cellulose acetate, vinyl acetate monomer, acetic esters and chloroacetic acid, production of plastics, pharmaceuticals, dyes, food additive (acidulant), photographic chemicals, insecticides, latex coagulant, oil-well acidiser, textile printing and laboratory reagent.

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia

Telephone	08 8440 2000
email	www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.

This product also has a Subsidiary Risk of 3.

Dangerous goods of Class 3 (Flammable Liquid) are incompatible in a placard load with any of the following:

Class 1, Class 2.1, if both the Class 3 and Class 2.1 dangerous goods are in bulk, Class 2.3, Class 4.2, Class 5, Class 6, if the Class 3 dangerous goods are nitromethane, Class 7.

Classification of the substance or mixture

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GHS classification in accordance with: UN GHS revision 7

- Flammable liquids, Cat. 3
- Skin corrosion/irritation, Cat. 1A
- Serious eye damage/eye irritation, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H226

Flammable liquid and vapor

H314

Causes severe skin burns and eye damage

Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233

Keep container tightly closed.

P240

Ground and bond container and receiving equipment.

P241

Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242

Use non-sparking tools.

P243

Take action to prevent static discharges.

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

P310

Immediately call a POISON CENTER/doctor/physician

P363

Wash contaminated clothing before reuse.

P370+P378

In case of fire: Use agents recommended in Section 5 of SDS for extinction

P403+P235

Store in a well-ventilated place. Keep cool.

P405

Store locked up.

P501

Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight	60.05
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Component	Identification	Weight %	Classifications
Acetic acid	CAS no.: 64-19-7 EC no.: 200-580-7 Index no.: 607-002-00-6	89 - 100 % (volume)	CLASSIFICATIONS: Flammable liquids, Cat. 3; Skin corrosion/irritation, Cat. 1A. HAZARDS: H226 - Flammable liquid and vapor; H314 - Causes severe skin burns and eye damage. [SCLs/M-factors/ATEs]: Skin Corr. 1A; H314: C

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Component	Identification	Weight %	Classifications
			$\geq 90 \%$; Skin Corr. 1B; H314: $25 \% \leq C < 90 \%$; Skin Irrit. 2; H315: $10 \% \leq C < 25 \%$; Eye Irrit. 2; H319: $10 \% \leq C < 25 \%$

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Advice to Doctor: Treat symptomatically as for strong acids. First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately medical attention is required.
In case of skin contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Seek immediate medical advice.
In case of eye contact	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Obtain medical attention immediately.
If swallowed	Rinse mouth thoroughly with water immediately. If swallowed, do NOT induce vomiting. Seek immediate medical assistance.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use foam, dry chemical, CO₂ or water spray.

Large fire: Use foam, fog or water spray. Do not use water jets.

If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

Specific hazards arising from the chemical

Hazards from Combustion Products: May liberate toxic fumes in fire such as oxides of carbon.

May be ignited by heat, sparks or flame. Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks). Many liquids are lighter than water. Containers may explode when heated. Vapours from runoff may create an explosion hazard. Fire will produce irritating, poisonous and/or corrosive gases.

Special protective actions for fire-fighters

Wear SCBA and fully-encapsulating, gas-tight suit when handling these substances. Structural firefighter's uniform is NOT effective for these materials.

SECTION 6: Accidental release measures

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Personal precautions, protective equipment and emergency procedures

Evacuate the area of all non-essential personnel. Avoid substance contact.

Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.

Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

ELIMINATE all ignition sources (no smoking, flares, sparks or flames) within at least 25m - All equipment used when handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours - Water spray may be used to knock down or divert vapour clouds. Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal.

SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.

SECTION 7: Handling and storage

Precautions for safe handling

Take precautionary measures against static discharges. All electrical equipment must be flameproofed. Do not breathe vapour. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Conditions for safe storage, including any incompatibilities

Storage Temperatures: Store above freezing point or containers may rupture.

Store in a warm place to prevent freezing (above 20 °C). Keep container tightly closed and dry, away from direct sunlight. Store away from strong

bases. Store away from sources of heat or ignition. Store away from oxidizing agents.

Corrosive to lead and most other metals.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 64-19-7

Acetic acid

AU/SWA (Australia): 15 ppm; 37 mg/m³ STEL inhalation; 10 ppm; 25 mg/m³ TWA inhalation

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

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Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/ NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Colourless liquid.
Color	Colourless
Odor	Strong odour of vinegar; pungent.
Odor threshold	0.2 - 1 ppm
Melting point/freezing point	16.7 °C
Boiling point or initial boiling point and boiling range	118 °C
Flammability	Flammable
Lower and upper explosion limit/ flammability limit	Flammable Limits - Lower: 4% Flammable Limits - Upper: 16%
Flash point	40 °C (Closed Cup); 39 °C (open cup)
Auto-ignition temperature	463 °C
Decomposition temperature	No data available.
pH	pH 2.5 (10 g/l H ₂ O)
Kinematic viscosity	Viscosity: 1.22 mPa.s @ 25 °C
Solubility	Solubility in Water: Miscible. Solubility in Organic Solvents: Miscible with alcohol, glycerol and ether. Insoluble in carbon disulfide.
Partition coefficient n-octanol/ water (log value)	Log P(o/w): -0.17
Vapor pressure	15.2 hPa @ 20 °C
Evaporation rate	0.97
Density and/or relative density	Specific Gravity: 1.05
Relative vapor density	2.07
Particle characteristics	No data available.

Further safety characteristics (supplemental)

Other Information: Dielectric constant: 6.1 @ 20 °C

Dipole moment: 1.5 Debye @ 20 °C

Heat of evaporation: 665 kJ/kg @ 118 °C

Refractive index: 1.3715 @ 20 °C

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SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.
Reacts with incompatible materials
Risk of ignition. Vapours may form explosive mixtures with air

Chemical stability

Hygroscopic, lachrymator.

Possibility of hazardous reactions

Vapours may form explosive mixture with air.
Will corrode metals.
Hazardous Polymerization: Will not occur.

Conditions to avoid

Strong heating and temperatures below 0 °C.

Incompatible materials

Combustible materials, oxidising agents (CrO₃, potassium permanganate, peroxi compounds, perchloric acid, chromosulfuric acid) strong bases, chromic acid, sodium peroxide, nitric acid, amines, anhydrides/water, aldehydes, alcohols, halogen-halogen compounds, metals (iron, zinc, magnesium (generation of hydrogen)), alkali hydroxides, nonmetallic halides, ethanolamine.

Hazardous decomposition products

Oxides of carbon.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 3310 mg/kg.
Acute Toxicity - Inhalation: LCLO (rat): 11.4 mg/l /4 hours.
Ingestion: Causes severe burns in oesophagus and stomach, gastric spasms, bloody vomiting, dyspnoea. Risk of perforation in the oesophagus and stomach. Pulmonary failure possible after aspiration of vomit. May cause shock, cardiovascular failure, acidosis and damage to kidneys.
Inhalation: Irritating to the mucous membranes and respiratory tract. May cause bronchitis, pneumonia and pulmonary oedema.

Skin corrosion/irritation

Acute Toxicity - Dermal: Skin - Rabbit
Result: Causes burns. - 4 h
(OECD Test Guideline 404)

Causes severe burns.
Skin corrosion/irritation: Skin Corrosion/Irritation: Category 1A

Serious eye damage/irritation

Liquid may cause severe burns and permanent injury. Risk of serious damage to eyes. High concentrations of vapours will cause irritation.

Serious eye damage/irritation: Eye Damage/Irritation: Category 1

Respiratory or skin sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

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Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

Specific target organ toxicity (STOT) - repeated exposure

Not classified based on available information.

Aspiration hazard

Not classified based on available information.

Additional information

Chronic Effects: Long term exposure may lead to dental erosion, skin thickening and discolouration, chronic irritation of nose and throat and conjunctivitis.

SECTION 12: Ecological information

Toxicity

Acute Toxicity - Fish: LC50 semi static - *Oncorhynchus mykiss* (rainbow trout) > 1,000 mg/l-96hr.

Acute Toxicity - Daphnia: EC50 (*Daphnia magna*): > 300 mg/l/48 h.

[8Z] Acute Toxicity - Algae: EC50 - *Skeletonema costatum* - > 1,000 mg/l - 72 h, static test

Persistence and degradability

Biodegradation: 99% / 30 d (closed bottle test).

Readily biodegradable.

Bioaccumulative potential

No bioaccumulation is to be expected ($\log P(o/w) < 1$).

Not expected to pass from aqueous solution into the atmosphere.

Mobility in soil

Product miscible in water.

Other adverse effects

Environmental Fate: Distribution: $\log P(o/w)$: -0.17.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Sewage disposal

No bioaccumulation is to be expected ($\log P(o/w) < 1$).

Not expected to pass from aqueous solution into the atmosphere.

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

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ADG (Road and Rail)

UN Number: 2789

Class: 8, 3

Packing Group: II

Proper Shipping Name: ACETIC ACID, GLACIAL

Hazchem emergency action code (EAC)

2P

IMDG

UN Number: 2789

Class: 8, 3

Packing Group: II

EMS Number:

Proper Shipping Name: ACETIC ACID, GLACIAL

IATA

UN Number: 2789

Class: 8, 3

Packing Group: II

Proper Shipping Name: ACETIC ACID, GLACIAL

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S6

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)