Infosafe No™ 1CH0J Issue Date :November 2020 RE-ISSUED by CHEMSUPP

Product Name **ACETIC ACID**

Classified as hazardous

1. Identification

GHS Product Identifier	ACETIC ACID
Company Name	CHEMSUPPLY AUSTRALIA PTY LTD (ABN 19 008 264 211)
Address	38 - 50 Bedford Street GILLMAN SA 5013 Australia
Telephone/Fax Number	Tel: (08) 8440-2000
Emergency phone number	CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)
E-mail Address	www.chemsupply.com.au
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.

Other Names

Name	Product Code
ACETIC ACID 90% FG	AP006
ACETIC ACID Glacial TG	AT009
ACETIC ACID Glacial AR	AA009
ACETIC ACID Anhydrous AR	AA221
Ethanoic acid, Vinegar acid, Methanecarboxylic acid	

Other Information

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.

2. Hazard Identification

GHS classification of the substance/mixture	Eye Damage/Irritation: Category 1 Flammable Liquids: Category 3 Skin Corrosion/Irritation: Category 1A
Signal Word (s)	DANGER
Hazard Statement (s)	H226 Flammable liquid and vapour. H314 Causes severe skin burns and eye damage.
Pictogram (s)	Flame, Corrosion

Precautionary statement – Prevention	P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting/.../equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash thoroughly after handling.

	P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement – Response	Swallowed P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P310 Immediately call a POISON CENTER or doctor/physician. Skin P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P310 Immediately call a POISON CENTER or doctor/physician. P363 Wash contaminated clothing before reuse. Inhaled P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician. Eyes 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 or doctor/physician. Fire P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Precautionary statement – Storage	P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Acetic acid	64-19-7	89-100 %

4. First-aid measures

Inhalation	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.
Ingestion	Rinse mouth thoroughly with water immediately. If swallowed, do NOT induce vomiting. Seek immediate medical assistance.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Seek immediate medical advice.
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.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of the patient. Treat symptomatically as for strong acids.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion Products	May liberate toxic fumes in fire such as oxides of carbon.
Specific Methods	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	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.
Hazchem Code	•2P
Precautions in connection with Fire	Wear SCBA and fully-encapsulating, gas-tight suit when handling these substances. Structural firefighter's uniform is NOT effective for these materials.

6. Accidental release measures

Spills & Disposal	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.
Personal Precautions	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.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.

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	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.
Corrosiveness	Corrosive to lead and most other metals.
Storage Regulations	Refer Australian Standard AS 3780-1994 'The storage and handling of corrosive substances'. Refer Australian Standard AS 1940-2017 'The storage and handling of flammable and combustible liquids'.
Storage Temperatures	Store above freezing point or containers may rupture.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Acetic acid	37	15	25	10	

Other Exposure Information

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
A time weighted average (TWA) has been established for Acetic acid (Safe Work Australia) of 25 mg/m³, (10 ppm). The corresponding STEL level is 37 mg/m³, (15 ppm). The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Appropriate engineering controls	Maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.
Respiratory Protection	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
Eye 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.
Hand Protection	Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.
Personal Protective Equipment	Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.
Footwear	Rubber boots.
Body Protection	Flame retardant antistatic protective clothing. 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.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Liquid
Appearance	Colourless liquid.
Odour	Strong odour of vinegar; pungent.
Melting Point	16.7 °C
Boiling Point	118 °C
Solubility in Water	Miscible.
Solubility in Organic Solvents	Miscible with alcohol, glycerol and ether. Insoluble in carbon disulfide.
Specific Gravity	1.05
pH	pH 2.5 (10 g/l H2O)
Vapour Pressure	15.2 hPa @ 20 °C
Vapour Density (Air=1)	2.07
Evaporation Rate	0.97
Odour Threshold	0.2 - 1 ppm
Viscosity	1.22 mPa.s @ 25 °C
Partition Coefficient: n-octanol/water	Log P(o/w): -0.17

Flash Point	40 °C (Closed Cup); 39 °C (open cup)
Flammability	Flammable liquid. The vapour mixes well with air, explosive mixtures are easily formed.
Auto-Ignition Temperature	463 °C
Flammable Limits - Lower	4%
Flammable Limits - Upper	16%
Molecular Weight	60.05
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

10. Stability and reactivity

Chemical Stability	Hygroscopic, lachrymator.
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.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat): 3310 mg/kg.
Acute Toxicity - Dermal	Skin - Rabbit Result: Causes burns. - 4 h (OECD Test Guideline 404)
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	Causes severe burns.
Eye	Liquid may cause severe burns and permanent injury. Risk of serious damage to eyes. High concentrations of vapours will cause irritation.
Respiratory sensitisation	Not classified based on available information.
Skin Sensitisation	Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information.
Reproductive Toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.

Chronic Effects	Long term exposure may lead to dental erosion, skin thickening and discolouration, chronic irritation of nose and throat and conjunctivitis.
Serious eye damage/irritation	Eye Damage/Irritation: Category 1
Mutagenicity	No evidence of mutagenic properties.
Skin corrosion/irritation	Skin Corrosion/Irritation: Category 1A

12. Ecological information

Ecotoxicity	Harmful effect due to pH shift.
Persistence and degradability	Biodegradation: 99% / 30 d (closed bottle test). Readily biodegradable.
Mobility	Product miscible in water.
Environmental Fate	Behaviour in environmental compartments: Distribution: log P(o/w): -0.17.
Bioaccumulative Potential	No bioaccumulation is to be expected (log P(o/w) <1). Not expected to pass from aqueous solution into the atmosphere.
Biological Properties	Harmful to aquatic life.
Environmental Protection	Do not allow to enter waters, waste water, or soil!
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.
Acute Toxicity - Algae	EC50 - Skeletonema costatum - > 1,000 mg/l - 72 h, static test

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information	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.
U.N. Number	2789
UN proper shipping name	ACETIC ACID, GLACIAL
Transport hazard class(es)	8
Sub.Risk	3
Hazchem Code	•2P
Packing Group	II
EPG Number	8B1
IERG Number	19

15. Regulatory information

Regulatory Information	All of the significant ingredients in this formulation are compliant with Australian Industrial Chemicals Introduction Scheme (AICIS) regulations. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Poisons Schedule	S6

16. Other Information

Literature References	'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 fot the Preparation of Safety Data Sheets for Hazardous Chemicals'. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand. Safe Work Australia, 'Hazardous Chemical Information System'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.
Contact Person/Point	Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT: All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.
Empirical Formula & Structural Formula	CH_3COOH

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