Section 1. IDENTIFICATION

Product Name:	**Acetic acid, >80% aqueous solution**
Other Names:	Ethanoic acid, >80%
Uses:	Manufacture of chemicals; research; photographic chemicals; latex coagulant; oil-well acidifier; textile printing; solvent for gums, resins and volatile oils; dyes; antimicrobial agent; insecticides; pharmaceuticals; food preservative; cosmetic use.
Chemical Family:	No Data Available
Chemical Formula:	C2H402
Chemical Name:	Acetic Acid, >80%
Product Description:	No Data Available

CONTACT DETAILS OF THE SUPPLIER OF THIS SAFETY DATA SHEET

Business:	Colonial Chemicals Australia
Address:	Skewes Road, Bendemeer, NSW, AUSTRALIA,2355
Postal Address:	P.O Box 167 Moonbi, NSW,2353
Phone:	02 67 696 658 **Mobile:** 0427 696658 **Fax:** 02 57015137
Email:	admin@colonialchemicals.com.au
Web Site:	www.colonialchemicals.com.au

Emergency Contact Details *-For emergencies only; DO NOT contact these companies for general product advice.*
Poisons Information Centre -Westmead NSW **131126 or 1800-251525**
Chemcall Australia ***1800-127406***

Section 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)	Schedule 6
Globally Harmonised System Hazard Classification	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Hazard Categories	Flammable Liquids - Category 3 Corrosive to Metals - Category 1 Skin Corrosion/Irritation - Category 1B Serious Eye Damage/Irritation - Category 1
Pictograms	

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Section 2. HAZARD IDENTIFICATION (Continued)

Signal Word		Danger	
Hazard Statements		**H226**	Flammable liquid and vapour.
		H290	May be corrosive to metals.
		H314	Causes severe skin burns and eye damage.
Precautionary Statements	Prevention	**P210**	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
		P260	Do not breathe mist/vapour/spray.
		P280	Wear protective gloves/protective clothing/eye protection/face protection.
		P233	Keep container tightly closed.
		P240	Ground/bond container and receiving equipment.
		P241	Use explosion-proof electrical/ventilating/lighting and all other equipment.
		P242	Use only non-sparking tools.
		P243	Take precautionary measures against static discharge.
	Response	**P370 + P378**	In case of fire: Alcohol resistant foam is the preferred fire-fighting medium. However, if it is not available, fine water spray or water fog can be used to extinguish.
		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.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P390	Absorb spillage to prevent material damage.
		P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
		P363	Wash contaminated clothing before reuse.
		P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	Storage	**P403 + P235**	Store in a well-ventilated place. Keep cool.
		P406	Store in corrosive resistant container with a resistant inner liner.
		P405	Store locked up.
	Disposal	**P501**	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Section 3. COMPOSITION / INFORMATION ON INGEDIENTS

INGREDIENTS

CHEMICAL ENTITY	FORMULA	CAS NUMBER	PROPORTION%
Acetic Acid	C2H4O2	64-19-7	>80%
Water	H2O	7732-18-5	Balance %

Section 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Immediately call a Poison Centre or doctor/physician for advice. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Centre or doctor/physician; Transport to hospital or doctor without delay.
Skin	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately - For gross contamination, drench clothing and skin with plenty of water before removing clothes. Flush skin and hair with running water for at least 15 minutes. Immediately call a Poison Centre or doctor/physician; Transport to hospital or doctor without delay.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician. Apply resuscitation if victim is not breathing - Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device. Administer oxygen if breathing is difficult. Transport to hospital or doctor without delay.
Advice to Doctor	Keep victim calm and warm - Obtain immediate medical care. Ensure that attending medical personnel are aware of identity and nature of product(s) involved, and take precautions to protect themselves. Treat symptomatically. The effects may be delayed - Medical observation is indicated.
Medical Conditions Aggravated by Exposure	Repeated or prolonged contact with skin may cause dermatitis.

Section 5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool container with water spray until well after fire is out. Avoid getting water inside containers.
Flammability Conditions	FLAMMABLE LIQUID: May be ignited by heat, sparks or flame.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO2), alcohol-resistant foam or water spray for extinction - Do not use water jets. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray can be used.
Fire and Explosion Hazard	Risk of violent reaction or explosion: 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. Vapours from runoff may create an explosion hazard. Containers may explode when heated.
Hazardous Products of Combustion	Fire will produce irritating, toxic and/or corrosive gases, including oxides of Carbon.
Special Fire Fighting Instructions	Contain runoff from fire control water - Runoff may pollute waterways; Vapours from runoff may create an explosion hazard.
Personal Protective Equipment	Liquid-tight chemical protective clothing (splash suit) in combination with self-contained breathing apparatus (SCBA) should be used.
Flash Point	39 - 43 °C [closed cup]
Lower Explosion Limit	4 %
Upper Explosion Limit	16 %
Auto Ignition Temperature	426 - 427 °C
Hazchem Code	•2P

Section 6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flame). All equipment used when handling the product must be earthed. Do not touch or walk through spilled material. Do not breathe vapours and prevent contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect material and place it in suitable containers for later disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.
Decontamination	Neutralise residues with lime or soda ash; Wash away remainder with plenty of water.
Environmental Precautionary Measures	Spillages and decontamination run-off may be washed to drains with large quantities of water; Due care must however still be exercised to avoid unnecessary pollution of watercourses.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground.
Personal Precautionary Measures	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground. Liquid-tight chemical protective clothing (splash suit) in combination with self-contained breathing apparatus (SCBA) should be used when handling leaking or damaged containers/equipment provided there is no risk of ignition.

Section 7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Do not breathe mist/vapours/spray and prevent contact with eyes, skin and clothing. Wear protective gloves/protective clothing/eye protection/face protection; In case of inadequate ventilation, wear respiratory protection (see SECTION 8). Keep away from heat and sources of ignition - No smoking. Ground/bond container and receiving equipment. Use explosion- proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Absorb spillage to prevent material damage.
Storage	Store in a cool, dry and well-ventilated place. Keep container tightly closed - check regularly for leaks. Keep away from foodstuffs and incompatible materials (oxidising agents, bases, metals). Keep away from heat and ignition sources. Store locked up.
Container	Keep only in the original container or in corrosive resistant container/container with a resistant inner liner.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	COMPONENT: Acetic acid (CAS No. 64-19-7): - Safe Work Australia Exposure Standard: TWA = 10 ppm (25 mg/m3); STEL = 15 ppm (37 mg/m3). - New Zealand WES: TWA = 10 ppm (25 mg/m3); STEL = 15 ppm (37 mg/m3). - NIOSH REL/OSHA PEL: TWA = 10 ppm (25 mg/m3); STEL = 15 ppm (37 mg/m3). - Immediately dangerous to life or health (IDLH) concentration: 50 ppm.
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use explosion-proof electrical/ventilating/lighting equipment.

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Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

Personal Protection Equipment	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists.Recommended filter type: ABE (organic vapour/inorganic vapour/acid gas) meeting the requirements of AS/NZS 1715 & AS/NZS 1716 or national equivalent. - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical goggles, face-shield. - Hand protection: Wear protective gloves. Recommended: Elbow-length impervious gloves, e.g. PVC. - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Overalls, splash apron or equivalent impervious (e.g. PVC) outer garment, rubber boots.
Special Hazard Precautions	Vapour heavier than air - prevent concentration in hollows or sumps. Do not enter confined spaces where vapour may have collected.
Work Hygienic Practices	Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Pungent, vinegar-like
Colour	Colourless
pH	No Data Available
Vapour Pressure	1.5 - 1.6 kPa (@ 20 °C)
Relative Vapour Density	2.07 - 2.1 Air = 1
Boiling Point	105 - 118 °C
Melting Point	-7 - +4 °C
Freezing Point	-7 - +4 °C
Solubility	Miscible with water
Specific Gravity	1.05 - 1.07 (Water = 1)
Flash Point	39 - 43 °C [closed cup]
Auto Ignition Temp	426 - 427 °C
Evaporation Rate	0.99 BuAc = 1
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	60.05
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	FLAMMABLE LIQUID: May be ignited by heat, sparks or flame.
Reactions That Release Gases or Vapours	Fire will produce irritating, toxic and/or corrosive gases, including oxides of Carbon.
Release of Invisible Flammable Vapours and Gases	Attacks many metals forming flammable/explosive hydrogen gas.

Section 10. STABILITY AND REACTIVITY

General Information	The substance is a weak acid. Reacts violently with oxidants and bases. **Chemical**
Stability	Product is considered stable; Unstable in the presence of incompatible materials.
Conditions to Avoid	Keep away from heat and sources of ignition.
Materials to Avoid	Incompatible/reactive with oxidising agents, bases, metals. Attacks some forms of plastic, rubber and coatings.
Hazardous Decomposition Products	Fire will produce irritating, toxic and/or corrosive gases, including oxides of Carbon. Attacks many metals forming flammable/explosive hydrogen gas.
Hazardous Polymerisation	Will not occur.

Section 11. TOXOCOLOGICAL INFORMATION

General Information	- Acute toxicity: Corrosive on ingestion. Inhalation of the vapour may cause lung oedema (effects may be delayed). Severe health effects have been reported (in humans) following single exposure by different routes, mainly due to the local corrosive effects of the chemical leading to systemic effects. - Skin corrosion/irritation: Corrosive to the skin. Causes severe skin burns, pain, redness, blisters. - Eye damage/irritation: Corrosive to the eyes. Causes serious eye damage, redness, pain, severe deep burns, loss of vision. - Respiratory/skin sensitisation: Repeated or prolonged contact with skin may cause dermatitis. - Germ cell mutagenicity: Not considered to be genotoxic. - Carcinogenicity: Not likely to be carcinogenic. - Reproductive toxicity: Does not show specific reproductive or developmental toxicity. - STOT (single exposure): Corrosive to the respiratory tract. - STOT (repeated exposure): The substance may have effects on the gastrointestinal tract, resulting in digestive disorders including pyrosis and constipation - These effects are not associated with any systemic findings, suggesting the effects observed could be due to its corrosive activity. - Aspiration toxicity: No information available.
Acute	
Ingestion	Acute toxicity (Oral): COMPONENT: Acetic acid (CAS No. 64-19-7): - LD50, Rats: >2,000 mg/kg bw.
Other	Acute toxicity (Dermal): COMPONENT: Acetic acid (CAS No. 64-19-7): - LD50, Rabbits: 1,060 mg/kg bw.
Inhalation	Acute toxicity (Inhalation): COMPONENT: Acetic acid (CAS No. 64-19-7): - LC50, Rats: 11.4 mg/l (4 h).
Carcinogen Category	None

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity	COMPONENT: Acetic acid (CAS No. 64-19-7): - LC50, Fish: 31.3 - 67.6 mg/l (96 h). - EC50, Crustacea: 18.9 mg/l (48 h). COMPONENT: Acetic acid (CAS No. 64-19-7):
Persistance/Degradability	Low persistence in water/soil; Low persistence in air.
Mobility	COMPONENT: Acetic acid (CAS No. 64-19-7): - High mobility in soil (KOC = 1).
Environmental Fate	Prevent entry into drains and waterways.
Bioaccumulation Potential	COMPONENT: Acetic acid (CAS No. 64-19-7): - Low bioaccumulative potential (LogKOW = -17).
Environmental Impact	No Data Available

Section 13. DISPOSAL CONSIDERATIONS

General Information	Recycle wherever possible. Dispose of product by neutralisation with soda-ash or soda-lime followed by burial in a land-fill specifically licensed to accept chemical and/or pharmaceutical wastes or incineration in a licensed apparatus. Decontaminate empty containers with 5 % aqueous sodium hydroxide or soda ash, followed by water.
Special Precautions for Landfill	Contaminated packaging: Containers may still present a chemical hazard/danger when empty. Observe all label safeguards until containers are cleaned and destroyed.

Section 14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG Code

Proper Shipping Name	ACETIC ACID SOLUTION, more than 80% acid, by mass
Class	8 Corrosive Substances
Subsidiary Risk(s)	3 Flammable Liquids
EPG	19 Liquids - Flammable , Toxic And/Or Corrosive
UN Number	2789
Hazchem	•2P
Pack Group	II
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	ACETIC ACID SOLUTION, more than 80% acid, by mass
Class	8 Corrosive Substances
Subsidiary Risk(s)	3 Flammable Liquids
UN Number	2789
Hazchem	2P
Pack Group	II
Special Provision	No Data Available
EMS	F-E, S-C
Marine Pollutant	No

Air Transport

IATA DGR

Proper Shipping Name	ACETIC ACID SOLUTION, more than 80% acid, by weight
Class	8 Corrosive Substances
Subsidiary Risk(s)	3 Flammable Liquids
UN Number	2789
Hazchem	2P
Pack Group	II
Special Provision	No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Section 15. REGULATORY INFORMATION

General Information	ACETIC ACID (excluding its salts and derivatives) and preparations containing more than 80 % of acetic acid for therapeutic use, is listed in SCHEDULE 2 of the SUSMP.
Poisons Schedule (Aust)	Schedule 6

National/Regional Inventories

Australia (AICS)	Listed

Section 16. OTHER INFORMATION

Always use product as directed. Please read all labels carefully before using product. Further information may be obtained by contacting the Technical Officer on 0267 696 658. Supplied by Colonial Chemicals Australia.

SDS Revision Number:	3
SDS Revision Date:	12 October 2016
Reason for issue:	Creation SDS (Replaces SDS version 2 Dated 07/08/2013)

In any event, the review and, if necessary, the re-issue of a SDS shall be no longer than 5 years after the last date of issue.

The information sourced for the preparation of this document was correct and complete at the time or writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.

Key legend/Abbreviations/Acronyms that may be used in this S.D.S.:

<	Less Than
>	Greater Than
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
AICS	Australian Inventory of Chemical Substances
atm	Atmosphere
CAS	Chemical Abstracts Service (Registry Number)
cm^2	Square Centimetres
CO2	Carbon Dioxide
COD	Chemical Oxygen Demand
deg C (°C)	Degrees Celcius
deg F (°F)	Degrees Farenheit
EPA (New Zealand)	Environmental Protection Authority of New Zealand
g	Grams
g/cm^3	Grams per Cubic Centimetre
g/l	Grams per Litre
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially
firefighters HSNO	Hazardous Substance and New Organism
IDLH	Immediately Dangerous to Life and Health
immiscible	Liquids are insoluable in each other. inHg
	Inch of Mercury
inH2O	Inch of Water
K	Kelvin
kg	Kilogram
kg/m^3	Kilograms per Cubic Metre
lb	Pound
LC	stands for lethal concentration.
LC50	is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD	stands for Lethal Dose.
LD50	is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L	Litre
m^3	Cubic Metre
mbar	Millibar
mg	Milligram
mg/24H	Milligrams per 24 Hours
mg/kg	Milligrams per Kilogram
mg/m^3	Milligrams per Cubic Metre
Misc or Miscible	Liquids form one homogeneous liquid phase regardless of the amount of either component present
mm	Millimetre
mmH2O	Millimetres of Water
mPa.s	Millipascals per Second
N/A	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Heath and Safety Commission
OECD	Organisation for Economic Co-operation and Development
Oz	Ounce
Pa	Pascal
PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

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ppb	Parts perBillion
ppm	Parts perMillion
ppm/2h	Parts per Million per 2Hours
ppm/6h	Parts per Million per 6Hours
psi	Pounds per SquareInch
R	Rankine
RCP	Reciprocal Calculation Procedure
SDS	Safety DataSheet
STEL	Short TermExposure Limit
TLV	Threshold LimitValue
tne	Tonne
TWA	Time Weighted Average (TWA/ES – Time Weighted Average or Exposure Standard)
Ug/24	Micrograms per 24 Hours
UN	United Nations
Wt	Weight

END OF SDS