Infosafe No™	1CH9D	Issue Date : January 2019	RE-ISSUED by CHEMSUPP

Product Name : **LACTIC ACID 88% w/w**

Classified as hazardous

1. Identification

GHS Product Identifier	LACTIC ACID 88% w/w
Company Name	CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)
Address	38 - 50 Bedford Street GILLMAN SA 5013 Australia
Telephone/Fax Number	Tel: (08) 8440-2000 Fax: (08) 8440-2001
Emergency phone number	CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)
Recommended use of the chemical and restrictions on use	Cultured dairy products, acidulant, chemicals (salts, plasticisers, adhesives, pharmaceuticals), mordant in dyeing wool, general purpose food additive, manufacture of lactates, dehairing, plumping and decalcifying hides, solvent for cellulose formate, flux for soft solder, catalyst in the casting of phenolaldehyde resins and laboratory reagent.

Other Names

Name	Product Code
LACTIC ACID 88% w/w LR	LL008
LACTIC ACID 88% w/w USP	LP008
1-Hydroxyethanecarboxylic acid, 2-Hydroxypropionic acid, Milk acid, alpha-Hydroxypropionic acid, Ethylidenelactic acid	

Other Information

Chem-Supply 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 Chem-Supply 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 Chem-Supply 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 Skin Corrosion/Irritation: Category 2
Signal Word (s)	DANGER
Hazard Statement (s)	H315 Causes skin irritation. H318 Causes serious eye damage.
Pictogram (s)	Corrosion

Precautionary statement – Prevention	P264 Wash thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement – Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse. 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.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

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Chemical Characterization Liquid

Ingredients

Name	CAS	Proportion	Hazard Symbol	Risk Phrase
Lactic acid	79-33-4	85-88 %		
Water	7732-18-5	12-15 %		

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 obtain medical aid if cough or other symptoms appear.

Ingestion Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.

Skin Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.

Eye contact Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.

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.

Other Information For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Suitable extinguishing media Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Hazards from Combustion Products Toxic fumes (carbon oxides) may be emitted in fire.

6. Accidental release measures

Personal Precautions Avoid contact with skin, eyes. Do not breathe fumes, vapour, gas.

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.

Environmental Precautions Prevent from entering into drains, ditches, rivers or the sea.

7. Handling and storage

Precautions for Safe Handling Avoid prolonged or repeated contact with skin and eyes . Avoid breathing vapour, spray or mists. Wash hands and face thoroughly after working with material.

Conditions for safe storage, including any incompatabilities Store in cool place and out of direct sunlight. Keep container tightly closed and in a well-ventilated place.

8. Exposure controls/personal protection

Other Exposure Information No exposure standards have been established for this product by Safe Work Australia, however, the TWA exposure standard for dusts/mists not otherwise specified is 10 mg/m3. All atmospheric contamination should be kept to as low a level as is workable.

Appropriate engineering controls In industrial situations 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. These methods should be used in preference to personal protective equipment.

Respiratory Protection An approved respirator must be worn if the occupational exposure limit is likely to be exceeded. If significant mists, vapours or aerosols are generated an approved respirator is recommended, selected and used in accordance with AS/NZS 1715 and AS/NZS 1716. 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	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Excellent: Nitrile, PVC. Poor: Neoprene, Natural.
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	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.
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 to slightly yellow liquid.
Odour	Slight acrid odour, similar to that of sour milk.
Melting Point	18 °C
Boiling Point	122 °C @ 15 mm Hg
Solubility in Water	Soluble (syrupy).
Solubility in Organic Solvents	Soluble in alcohol, glycerol and furfural. Insoluble in chloroform, petroleum ether and carbon disulfide.
Specific Gravity	1.21
pH	~2.8 (10 g/l, H2O, 20 °C)
Vapour Pressure	0.1 mmHg (25 °C)
Evaporation Rate	< 1 (BuAc=1)
Viscosity	20-40 mPa*s @ 20°C
Partition Coefficient: n-octanol/water	log Pow: -0.62
Flash Point	113 °C (closed cup).
Flammability	Combustible.
Molecular Weight	90.08
Other Information	Refractive Index: 1.428 Taste: Slight acrid

10. Stability and reactivity

Chemical Stability	Stable under normal use conditons. Hygroscopic
Conditions to Avoid	Heat, flames, ignition sources and incompatibles.
Incompatible Materials	Strong alkalis, oxidising agents, reducing agents, iodides, hydrofluoric acid, nitric acid plus hydrofluoric acid and albumin.
Hazardous Decomposition Products	Emits toxic fumes under fire conditions.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Acute Toxicity - Oral	LD50 (rat): 3543 mg/kg (pure subst.)
Acute Toxicity - Dermal	LD50 (rabbit): > 2000 mg/kg (pure subst.)
Ingestion	Corrosive. Causes burns in the mouth, throat and stomach. May cause diarrhea, nausea, vomiting, perspiration, shortness of breath, cyanosis and vascular collapse. May cause severe and permanent

	damage to the digestive tract. Absorption of large quantities may results in kidney damage.
Inhalation	Causes burns. Extremely destructive and corrosive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. May result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Risk of aspiration! Symptoms of exposure may include sore throat, coughing, burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.
Skin	Causes severe skin irritations. May be harmful if absorbed through the skin. Prolonged or over exposure may lead to a corrosive effect on the skin, burns or ulcerations.
Eye	Causes burns. Risk of serious damage to eyes! Symptoms include redness, pain, blurred vision and eye damage. May cause chemical conjunctivitis and corneal damage.
Carcinogenicity	No evidence of carcinogenic properties.
Chronic Effects	There are no known adverse effects following chronic exposure to the material.
Mutagenicity	No evidence of mutagenic effects.

12. Ecological information

Ecotoxicity	Harmful effect due to pH shift.
Persistence and degradability	This material is expected to readily biodegrade: BOD (5 days): 50%
Bioaccumulative Potential	No bioaccumulation is to be expected (log P(o/w) <1.0).
Acute Toxicity - Fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 130 mg/l - 96h
Acute Toxicity - Daphnia	static test EC50 - Daphnia magna (Water flea) - 130 mg/l - 48 h (OECD Test Guideline 202)

13. Disposal considerations

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

14. Transport information

Transport Information	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. Regulatory information

Regulatory Information	Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Poisons Schedule	Not Scheduled

16. Other Information

Literature References	'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007. Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010. Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'. Safe Work Australia, 'Hazardous Chemical Information System, 2005'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995) 3rd Edition]'.
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. Chem-Supply accepts no responsibility whatsoever for its accuracy or for any results

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Empirical Formula & Structural Formula CH3 CH (OH) COOH

...End Of MSDS...