

# Material Safety Data Sheet

## LACTIC ACID 85%

**Infosafe No.** JXF43      **Issue Date** October 2006      **Status** ISSUED by AJAXFC

Classified as hazardous

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name** LACTIC ACID 85%

**Product Code** 270

**Company Name** Ajax Finechem (ABN 64 121 927 786)

**Address** 17/21 Bay Road Taren Point  
NSW 2229

**Emergency Tel.** 1800 638 556 (24 h)

**Telephone/Fax Number** Tel: +61 2 9524 0757

**Recommended Use** Food additive, specialty chemical.

Other Names	Name	Product Code
	LACTIC ACID 85%	271
	LACTIC ACID 90%	5509

### 2. HAZARDS IDENTIFICATION

#### Hazard Classification

Australia:  
Classified as Hazardous, according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).  
Not classified as Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

New Zealand:

Classified as Hazardous according to the Hazardous Substances (Classification) Regulations 2001, New Zealand.

Not classified as Dangerous Goods for transport, according to the NZS 5433:1999 Transport of Dangerous Goods on Land.

HSNO classification:

Classified as 6.3A - A substance that is irritating to the skin

Classified as 8.3A - A substance that is corrosive to ocular tissue

**Risk Phrase  
(s)**

R41 Risk of serious damage to eyes.  
R37/38 Irritating to respiratory system and skin.

**Safety  
Phrase(s)**

S2 Keep out of reach of children.  
S23 Do not breathe gas/fumes/vapour/spray  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S24/25 Avoid contact with skin and eyes.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Ingredients	Name	CAS	Proportion
	Lactic acid	50-21-5	60-100 %
	Ingredients determined not to be hazardous.		Balance

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### 4. FIRST AID MEASURES

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<b>Inhalation</b>	Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have a qualified person give oxygen through a face mask if breathing is difficult. If irritation persists seek medical attention.
<b>Ingestion</b>	DO NOT induce vomiting. Immediately wash out mouth with water and then give plenty of water to drink. If irritation develops seek medical attention.
<b>Skin</b>	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention.
<b>Eye</b>	If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.
<b>First Aid Facilities</b>	Eye wash and normal washroom facilities.
<b>Advice to Doctor</b>	Treat symptomatically.

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## 5. FIRE FIGHTING MEASURES

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<b>Suitable Extinguishing Media</b>	Water, carbon dioxide or foam.
<b>Hazards from Combustion Products</b>	Non combustible.
<b>Decomposition Temp.</b>	> 200°C
<b>Precautions in connection with Fire</b>	Wear Self-Contained Breathing Apparatus (S.C.B.A) and full protective clothing to minimise skin exposure.

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## 6. ACCIDENTAL RELEASE MEASURES

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<b>Emergency Procedures</b>	Increase ventilation. Evacuate all unnecessary personnel. Wear respiratory protection and full protective clothing to minimise skin and eye exposure. If possible contain the spill. Place inert absorbent such as vermiculite, sand or dirt onto material. Collect the material and place into a suitable labelled container. Mop up material and place into the same container. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.
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## 7. HANDLING AND STORAGE

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<b>Precautions for Safe Handling</b>	Use in a well ventilated area. DO NOT store or use in confined spaces. Build up of mists or vapours in the atmosphere must be prevented. Avoid breathing in spray or mists or vapours. Repeated or prolonged exposure without protection should be prevented in order to lessen the possibility of disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene ie. washing hands prior to eating, drinking, smoking or using toilet facilities.
<b>Conditions for Safe Storage</b>	Store in a cool, dry, well-ventilated area, out of direct sunlight. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks.
<b>Handling Temperatures</b>	< 200°C
<b>Recommended Materials</b>	Plastic or stainless steel 316L containers.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**National**

<b>Exposure Standards</b>	No exposure standards have been established for this material by the National Occupational Health And Safety Commission (NOHSC).
<b>Biological Limit Values</b>	No biological limit allocated.
<b>Engineering Controls</b>	Use with good general ventilation. If mists or vapours are produced local exhaust ventilation should be used.
<b>Respiratory Protection</b>	If engineering controls are not effective in controlling airborne exposure then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. 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.
<b>Eye Protection</b>	Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.
<b>Hand Protection</b>	Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
<b>Body Protection</b>	Wear appropriate clothing including chemical resistant apron where clothing is likely to be contaminated. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	Colourless/yellow/light brown aqueous solution.
<b>Odour</b>	Characteristic odour.
<b>Decomposition Temperature</b>	> 200°C
<b>Melting Point</b>	Not available
<b>Boiling Point</b>	110°C (40% solution), 125°C (90% solution).
<b>Solubility in Water</b>	Completely soluble.
<b>Specific Gravity</b>	1.19 - 1.25 g/ml

<b>pH Value</b>	< 2 @ 25°C
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (Air=1)</b>	Not available.
<b>Viscosity</b>	5 - 60 mPa.s @ 25°C (50 - 90% solution)
<b>Flash Point</b>	Not applicable
<b>Auto-Ignition Temperature</b>	Not applicable
<b>Flammable Limits - Lower</b>	Not applicable
<b>Flammable Limits - Upper</b>	Not applicable
<b>Other Information</b>	Partition coefficient (n-octanol/water) log Pow = - 0.62

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Avoid temperatures above 200°C.
<b>Incompatible Materials</b>	Oxidising agents.
<b>Hazardous Decomposition Products</b>	Thermal decomposition may result in the release of toxic and/or irritating fumes.
<b>Hazardous Reactions</b>	May react with oxidising agents.
<b>Hazardous Polymerization</b>	Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Toxicology Information</b>	Acute toxicity: LD50 ORAL (rat): 3730 mg/kg LD50 ORAL (mouse): 4875 mg/kg LD50 DERMAL (rabbit): > 2000 mg/kg
<b>Inhalation</b>	Irritating to respiratory system. Inhalation of product vapours will cause

irritation of the nose, throat and respiratory system.

<b>Ingestion</b>	Ingestion of this product may irritate the gastric tract causing nausea and vomiting.
<b>Skin</b>	Irritating to skin resulting in redness and itching.
<b>Eye</b>	Risk of serious damage to eyes. Eye contact will cause stinging, blurring, tearing, severe pain and possible permanent corneal damage.
<b>Chronic Effects</b>	Not available.

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## 12. ECOLOGICAL INFORMATION

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<b>Ecotoxicity</b>	Not available.
<b>Persistence / Degradability</b>	Readily biodegradable, according to appropriate OECD test. Biochemical oxygen demand (BOD) <sub>5</sub> = 0.45 mg O <sub>2</sub> /mg Biochemical oxygen demand (BOD) <sub>20</sub> = 0.60 mg O <sub>2</sub> /mg Chemical oxygen demand (COD) <sub>5</sub> = 0.90 mg O <sub>2</sub> /mg
<b>Mobility</b>	Completely soluble. Surface tension: 50 - 44 mN (50 - 90% solution)
<b>Bioaccumulative Potential</b>	None.
<b>Information on Ecological Effects</b>	EC <sub>50</sub> 48hr Daphnia: 240 mg/l LC <sub>50</sub> 48hr Fish: 320 mg/l EC <sub>50</sub> Algae: 3500 mg/l (neutral).
<b>Environment Protection</b>	Do not allow product to enter drains, waterways or sewers.

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## 13. DISPOSAL CONSIDERATIONS

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<b>Disposal Considerations</b>	Dispose of waste according to federal, EPA and state regulations.
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## 14. TRANSPORT INFORMATION

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<b>Transport Information</b>	Australia: Not classified as Dangerous Goods, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.  New Zealand: Not classified as Dangerous Goods for transport according to the NZS 5433:1999 Transport of Dangerous Goods on Land.
<b>Storage and Transport</b>	Not classified as dangerous goods.

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## 15. REGULATORY INFORMATION

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**Regulatory Information** Australia:  
Classified as hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC).  
Poison Schedule: Not Scheduled

**Poisons Schedule** Not Scheduled

**National and or International Regulatory Information** New Zealand:  
Classified as Hazardous according to the Hazardous Substances (Classification) Regulations 2001.  
Group standard:  
Additives, Process Chemicals and Raw Materials (Corrosive) Group Standard 2006  
HSNO Approval Number  
HSR002491.

**Hazard Category** Irritant

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## 16. OTHER INFORMATION

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**Date of preparation or last revision of MSDS** MSDS Reviewed: October 2006  
MSDS Supersedes: September 2005

**Contact Person/Point** For further information contact the Compliance Manager on (02) 9524 0757 during business hours. In emergencies Australia 1800 638 556

IMPORTANT ADVICE: This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Ajax Finechem Pty Ltd. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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**End of MSDS**

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