



SAFETY DATA SHEET

LACTIC ACID

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME:	LACTIC ACID
CHEMICAL NAME 2:	S(+)-2-HYDROXYPROPIONIC ACID
PART No.:	RM138
SYNONYMS, TRADE NAMES:	L(+) Lactic acid; dextrorotatory lactic acid
SUPPLIER:	J M Loveridge plc Southbrook Road, Southampton Hampshire SO15 1BH Tel: 023 8022 2008 Fax: 023 8022 2117

2. COMPOSITION/INFORMATION ON INGREDIENTS:

EEC (EINECS) No.	201-196-2
CAS No.:	79-33-4

3. HAZARDS IDENTIFICATION:

Irritating to skin. Risk of serious damage to eyes.

4. FIRST AID MEASURES:

GENERAL:	IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION
INHALATION:	Move affected person to fresh air. If recovery not rapid, seek medical attention. If breathing stops, provide artificial respiration. Keep affected person warm and at rest.
INGESTION:	Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep patient at rest and obtain medical attention.
SKIN:	Remove contaminated clothing. Wash affected area with plenty of soap and water. Obtain medical attention. Launder clothing before re-use.
EYES:	Rinse immediately with plenty of water for at least 5 minutes while lifting the eye lids. Seek medical attention. Continue to rinse.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA:	Use extinguishing media suitable against surrounding fire or the cause of fire.
SPECIAL FIRE FIGHTING PROCEDURES:	Do not release contaminated water used for extinguishing into drains, soil or surface water.
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL:	Avoid direct contact with skin, eyes and clothing. Do not breathe vapour or fumes.
PRECAUTIONS TO PROTECT ENVIRONMENT:	Prevent contamination of soil, drains and surface water.
SPILL CLEANUP METHODS:	Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. Neutralise spillage with alkaline material (sodium bicarbonate or soda-ash). Wash the area clean with water and detergent, observing environmental requirements.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS:	HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid contact with skin or eyes.
STORAGE PRECAUTIONS:	Store in a cool, dry, well ventilated place, in securely closed original container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

VENTILATION:	Ensure adequate ventilation.
PROTECTIVE GLOVES:	Use imperious gloves made of butyl rubber or polyethylene.
EYE PROTECTION:	Approved chemical safety goggles or face protection.
OTHER PROTECTION:	Wear protective clothing and closed footwear. Wear personal protective equipment appropriate to the quantity of material handled.
HYGIENIC WORK PRACTICES:	SKIN PROTECTION - apply barrier cream to hands and exposed skin.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Colourless or slightly yellow liquid.		
DENSITY/SPECIFIC GRAVITY (g/ml):	~1.2	Temperature (°C):	20
SOLUBILITY DESCRIPTION:	Miscible with water in all proportions.		

10. STABILITY AND REACTIVITY:

STABILITY:	Stable under normal conditions of use.
MATERIALS TO AVOID:	Alkalis, bases and oxidising agents. Nitric acid.
HAZARDOUS DECOMP. PRODUCTS:	Noxious, toxic or corrosive vapours may be released in a fire situation.

11. TOXICOLOGICAL INFORMATION:

TOXIC DOSE - LD 50:	3730 mg/kg (oral rat)
HEALTH HAZARDS, GENERAL:	Liquid may cause eye damage.
INHALATION:	Irritating to respiratory system if inhaled as mist.
INGESTION:	May cause burns to mucous membranes, throat and stomach.
SKIN:	Irritating to skin.
EYES:	Corrosive to eyes.

12. ECOLOGICAL INFORMATION:

Ecotoxicological data	LC50 48 hours fish 320 mg/l
EC 50, 48 HRS, DAPHNIA, mg/l:	240
ECOLOGICAL INFORMATION:	Avoid release to the environment.
MOBILITY:	Soluble in water.
BIO ACCUMULATION:	Not expected to bio-accumulate.
DEGRADABILITY:	Readily biodegradable. Neutralised slowly by natural alkalinity. Biochemical Oxygen Demand (BOD) 5 = 0.45 mg O2/mg

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS:	This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.
WASTE CLASS:	WASTE CODE:0705** HAZARDOUS PROPERTY: H8

14. TRANSPORT INFORMATION:

ADR CLASS No.:	8
ADR CLASS:	Class 8: Corrosive substances.
ADR ITEM No.:	40°(c)
HAZARD No. (ADR):	80 Corrosive or slightly corrosive substance.
ADR MARGINAL:	2801
HAZCHEM CODE:	2X
PROPER SHIPPING NAME I:	CORROSIVE LIQUID, ACIDIC, ORGANIC, NOS
PROPER SHIPPING NAME II:	Technical name - (Lactic acid solution)
UN No. SEA:	UN 3265
IMDG CLASS:	8
IMDG PAGE No.:	8147-1
IMDG PACK GR.:	III
UN No., AIR:	UN-ID 3265
ICAO CLASS:	8
AIR PACK GR.:	III

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:



RISK PHRASES:	R-41 Risk of serious damage to eyes. R-38 Irritating to skin.
SAFETY PHRASES:	S-39 Wear eye/face protection. S-24 Avoid contact with skin. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
UK REGULATORY REFERENCES:	Classification, Packaging and Labelling Regulations 1984. Chemicals (Hazard Information & Packaging) Regulations 1993.

16. OTHER INFORMATION:

INFORMATION SOURCES:	This product has been classified in accordance with CHIP3 regulations.
REVISION COMMENTS:	Edition 01; Revised item(s):
ISSUED BY:	MK
SDS No.:	257

DATE: 12/07/02

DISCLAIMER: The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.