

Revision: 1.2

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Section 1. Identification

1.1 Product Identifier 1185

Product Name LACTIC ACID pure

CAS Number 79-33-4

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $\text{C}_3\text{H}_5\text{O}_3$

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 1C

H314: Causes severe skin burns and eye damage.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements Causes severe skin burns and eye damage.

Precautionary Statements Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention.

Supplemental Hazard Information (EU) Corrosive to the respiratory tract.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Lactic acid	79-33-4	201-196-2		>80%	Skin Corr. 1C

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure.

Ingestion Wash out the patients mouth thoroughly with water. Do not induce vomiting.

Personal protection for first aiders Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Alcohol resistant foam, dry powder, or carbon dioxide. Use water spray to keep fire exposed containers cool.

Unsuitable Media Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards Not combustible but assists burning. Presents no specific health hazard if involved in a fire.

5.3 Advice for firefighters

Advice for firefighters Consider all other materials in the vicinity.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Presents no major hazards. Do not allow other people to enter area.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period)
Lactic acid	79-33-4	>80%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hand Protection	Use solvent resistant gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless to pale yellow liquid.
Odour	Mild odour.
pH	2 @ 20°C 5%
Boiling Point	122°C
Melting Point	16.8°C
Flash Point	74°C (Closed cup)
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	Slight.
Oxidising Properties	No.
Vapour Pressure	1mmHg @ 85°C
Relative Density	1.0220
Water Solubility	Completely miscible in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatible Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	The liquid and solutions will cause Corrosive injury to tissues contacted.
LD50 Skin	>2000mg/kg Rabbit
Ingestion	Low order of acute toxicity.
LD50 Oral	3543mg/kg Rat
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	>7.94mg/l Rat (4 hours)
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.
Other Information	Used in the food industry.

Section 12. Ecological

12.1	Toxicity	Readily bio-degraded in the environment.
	LC50 Algal	Not available
	LC50 Crustacea	130mg/l Daphnia magna (48 hours)
	LC50 Fish	130mg/l Rainbow Trout (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste.
Contaminated Packaging	Use a licensed waste disposer. Wash out containers with water.

Section 14. Transport Information

14.1 UN Number	3265
14.2 Proper Shipping Name	Corrosive liquid, acidic, organic, N.O.S. (Lactic Acid)
14.3 Transport classes	
UN classification	8
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	80
Tunnel Restriction Code	E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 1C

Signal word Danger

Hazard Pictograms



Hazard Statements H314
Causes severe skin burns and eye damage.

Precautionary Statements P264, P280, P305+P351+P338, P337+P313
Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention.

Supplemental Hazard Information (EU) EUH071
Corrosive to the respiratory tract.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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