

Safety Data Sheet

#90023276 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Lactic Acid 90%	79-33-4	C3H6O3	10	21 Jul 2026

SECTION 1

Identification

Product name	L-(+)-Lactic acid (approx. 90%) pure USP, Food grade
CAS number	79-33-4
Chemical formula	C3H6O3
Molecular weight	90.08
SMILES	<chem>C[C@@H](C(=O)O)O</chem>
EC / EINECS number	201-196-2
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

**DANGER**

CODE	HAZARD STATEMENT
EUH071	Corrosive to the respiratory tract
H290	May be corrosive to metals
H303	May be harmful if swallowed
H314 (sub cat. 1C)	Causes severe skin burns and eye damage
H318	Causes serious eye damage
CODE	PRECAUTIONARY STATEMENT
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
Other hazards (e.g. PBT / vPvB, not classified)	<i>Not applicable</i>

SECTION 3

Composition / information on ingredients

Purity / concentration	<i>Not applicable</i>
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures

Inhalation	<i>Not applicable</i>
Skin contact	<i>Not applicable</i>
Eye contact	<i>Not applicable</i>
Ingestion	<i>Not applicable</i>
Symptoms / effects & medical attention	<i>Not applicable</i>

SECTION 5

Fire-fighting measures

Suitable extinguishing media *Not applicable*

Unsuitable extinguishing media *Not applicable*

Special hazards *Not applicable*

Advice for firefighters *Not applicable*

SECTION 6

Accidental release measures

Personal precautions & PPE *Not applicable*

Environmental precautions *Not applicable*

Containment & clean-up methods *Not applicable*

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature Ambient

Precautions for safe handling *Not applicable*

Conditions for safe storage (incompatibilities) *Not applicable*

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

Eye / face protection Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection *Not applicable*

Respiratory protection Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	1.2 g/mL DERIVED FROM: LITERATURE
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Flash point	110 °C DERIVED FROM: LITERATURE
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Acidity	Acid DERIVED FROM: LITERATURE
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Appearance / physical state	Not applicable
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Colour	Not applicable
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Odour	Not applicable
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Melting / freezing point	Not applicable
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Boiling point	Not applicable
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Solubility (water)	Not applicable
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pH	Not applicable
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Vapour pressure	Not applicable
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Partition coefficient (log Pow)	Not applicable
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Auto-ignition / decomposition temp	Not applicable
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SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under the prescribed storage conditions Forms explosive mixtures with air. A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: when finely distributed, the risk of a dust explosion may be assumed.
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Conditions to avoid	Reacts violently with strong oxidising substances. Heating
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Incompatible materials	Strong oxidising agents
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Hazardous decomposition products	Carbon monoxide, carbon dioxide, and other toxic gases. See section 5
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SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	LD50 : Value-3543 mg/kg, Oral - Rat (External MSDS) LC50: Value >7.94 mg/l, Inhalation. 4 hours Rat (External MSDS) LD50: Value > 2000 mg/kg Dermal - Rabbit (External MSDS)
Skin corrosion / irritation	Causes severe skin burns (category 1C)
Eye corrosion / irritation	Causes serious eye damage (category 1)
Respiratory / skin sensitisation	Result: Negative. Test: Buehler Test. Species: Guinea Pig (External MSDS)
Carcinogenicity	Result: Negative. with and without metabolic activation. Species: Escherichia coli/Salmonella typhimurium Result: Negative. - Human lymphocytes Result: Negative. with and without metabolic activation, Species: Mouse lymphoma cells
Mutagenicity	<i>Not applicable</i>
Reproductive toxicity	<i>Not applicable</i>
STOT (single / repeated exposure)	Single: Corrosive to the respiratory tract. (External MSDS)
Aspiration hazard	Not specified
Endocrine disruptors	Not specified

SECTION 12

Ecological information

Aquatic toxicity	Not specified
Persistence & degradability	Not specified
Bioaccumulative potential	Not specified
Mobility in soil	Not specified
PBT / vPvB assessment	Not specified

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of contents/container according to local regulations
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SECTION 14

Transport information

UN number	UN3265
Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Class	8
Packing group	III
Transport category	3
Tunnel code	(E)
Packing instruction (ADR)	P001
Packing instruction (IMDG)	P001
Environmental hazards	<i>Not applicable</i>
Special precautions for user	<i>Not applicable</i>



SECTION 15

Regulatory information

REACH code	Y110
UFI code	<i>Not applicable</i>
ECHA notification	<i>Not applicable</i>
Chemical safety assessment carried out?	<i>Not applicable</i>

SECTION 16

Other information

Revision notes / other information	<i>Not applicable</i>
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