



SAFETY DATA SHEET L(+)-LACTIC ACID BUFFERED

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name L(+)-LACTIC ACID BUFFERED
Product number 46063
Synonyms; trade names L(+)-LACTIC ACID BUFF 80% SOL

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Food / Feed additive Industrial Pharmaceuticals pH control

1.3. Details of the supplier of the safety data sheet

Supplier Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
sds@univar.com
+44 1274 267306

1.4. Emergency telephone number

Emergency Contact Number +44 1274 267346
(Office Hours)

Emergency Contact Number +441865 407333
(Outside Office Hours)

Sds No. 46063

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified
Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi; R41, R38

2.2. Label elements

Pictogram



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Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary statements	P264 Wash contaminated skin thoroughly after handling. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Contains	(L) LACTIC ACID

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

(L) LACTIC ACID			30-60%
CAS number: 79-33-4	EC number: 201-196-2	REACH registration number: 01-2119474164-39	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315		Xi; R41, R38	
Eye Dam. 1 - H318			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

Skin contact	Irritating to skin.
Eye contact	Causes serious eye damage.

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

Notes for the doctor	No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
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5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Small Spillages: Neutralise spilled material with crushed limestone, slaked lime (calcium hydroxide), soda ash (sodium carbonate) or sodium bicarbonate. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Provide adequate ventilation. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures above 5°C.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

(L) LACTIC ACID (CAS: 79-33-4)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Short term : 592 mg/m ³ Consumer - Oral; : 35.4 mg/kg/day Consumer - Inhalation; : 296

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PNEC

- Fresh water; 1.3 mg/l
- STP; 10

SODIUM LACTATE (CAS: 867-56-1)

Ingredient comments

No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless to pale yellow.
Odour	Almost odourless.
pH	pH (diluted solution): < 3 @ 10
Relative density	1.24 - 1.25 @ @ 20°C
Solubility(ies)	Completely soluble in water.

9.2. Other information

Other information	No information required.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of the following substances: Carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion May cause discomfort if swallowed.

Skin contact Irritating to skin.

Eye contact Risk of serious damage to eyes.

Toxicological information on ingredients.

(L) LACTIC ACID

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,543.0

Species Rat

ATE oral (mg/kg) 3,543.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 7.94

Species Rat

Notes (inhalation LC₅₀) OECD 403

ATE inhalation (vapours mg/l) 7.94

Skin corrosion/irritation

Animal data OECD 404 Irritating.

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Inhalation	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion	May cause discomfort if swallowed.
Skin contact	Irritating to skin.
Eye contact	Risk of serious damage to eyes.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

(L) LACTIC ACID

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

(L) LACTIC ACID

Acute toxicity - fish	LC50, 96 hours, 96 hours: 130 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours, 48 hours: 130 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours, 72 hours: 2800 mg/l,

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

Biological oxygen demand 0.00045 g O₂/g substance

Chemical oxygen demand 000090 g O₂/g substance

Ecological information on ingredients.

(L) LACTIC ACID

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Ecological information on ingredients.

(L) LACTIC ACID

Bioaccumulative potential The product is not bioaccumulating.

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Partition coefficient log Pow: -0.72

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

(L) LACTIC ACID

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

(L) LACTIC ACID

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

(L) LACTIC ACID

Cod 0.90 mg O₂ /mg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

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Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Dangerous Preparations Directive 1999/45/EC.
Guidance	CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131.
Water hazard classification	WGK 1

15.2. Chemical safety assessment

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	22/07/2015
Revision	01
SDS number	46063
SDS status	Approved.
Signature	Jitendra Panchal
Risk phrases in full	R38 Irritating to skin. R41 Risk of serious damage to eyes.
Hazard statements in full	H315 Causes skin irritation. H318 Causes serious eye damage.

TURKISH SIGNATURE