

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Lactic Acid USP 88% L(+)
Commercial Name Not available
Product Use Food additive, Specialty chemical
Restrictions On Use Not available
Product Code 50-3110
Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Skin corrosion/irritation Category 2 - H315 Serious eye damage/eye irritation Category 1 - H318
CFR 1910.1200

Signal Word DANGER

Hazard Statement(s) Causes skin irritation. Causes serious eye damage.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention P280 - Wear protective gloves/protective clothing/eye protection/face protection
Response P302 + P352 - IF ON SKIN: Wash with plenty of water and soap P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER/doctor P362 - Take off contaminated clothing
Storage Not available
Disposal Not available.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Lactic Acid USP 88% L(+)
% By Weight 100
CAS# 79-33-4
Molecular Weight 90.08 g/mole
Chemical Formula C₃H₆O₃
Synonym(s) 2-Hydroxypropionic acid

Mixtures	CAS#	% by Weight	TLV/PEL	LC50/LD50
Name				
{L-(+)-}Lactic acid	79-33-4	100		ORAL (LD50): Acute: 3730 mg/kg [Rat]. 1870 mg/kg [Guinea pig].

Section 4: First-Aid Measures

Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult a physician.
Ingestion	Rinse mouth. Get medical attention immediately if symptoms occur.
Symptoms/Effects	
Acute	If in eyes: Burning feeling, Redness, Pain. If on skin: Itching, Redness
Delayed	If in eyes: Burning feeling, Redness, Pain. If on skin: Itching, Redness

Immediate Medical Attention

Treat symptomatically. If breathing is difficult, give oxygen. Keep victim under observation. Symptoms may be delayed.

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Water spray, Foam, Dry powder, Carbon dioxide (CO₂).

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Products of Combustion

Not available

Firefighters Special Equipment and Precautions

Evacuate non-essential personnel. Move containers from fire area if you can do it without risk. Keep containers and surroundings cool with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system. Wear self-contained breathing apparatus and protective suit.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Evacuate personnel to safe areas. Do not touch or walk through spilled material. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Use personal protective equipment. Ensure adequate ventilation. Environmental precautions: Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Methods and material for containment and cleaning up: Large amounts: Prevent further leakage or spillage if safe to do so. Dike to collect large spills. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small amounts: Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water. Never return spills in original containers for re-use.

Section 7: Handling and Storage

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid breathing vapours or mists. Ensure adequate ventilation. Wear personal protective equipment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. See annex for more detailed information. Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Keep containers tightly closed in a cool, well-ventilated place. Incompatible with oxidising agents.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Contains no substances with occupational exposure limit values.
Engineering Controls	Ensure adequate ventilation, especially in confined areas. Keep at temperatures below 200 °C / 392 °F. Ensure that eyewash stations and safety showers are close to the workstation location. See annex for more detailed information.

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Personal Protection

Eye protection: Face-shield (EN166). Hand Protection: Protective gloves (EN374): Butyl rubber. Glove thickness: 0.5 mm . Break through time: >8 hours. Unsuitable materials: Natural Rubber, Nitrile rubber, Fluorinated rubber, PVC. Skin and body protection: Long sleeved clothing. Chemical resistant apron. Boots. Respiratory protection: Aerosol or mist formation: In case of insufficient ventilation wear suitable respiratory equipment (APF). Recommended Filter Type A, Brown. Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Workers must be trained in the proper use and handling of this product as required under applicable regulations. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use. Environmental Exposure Controls: The product should not be allowed to enter drains, water courses or the soil.

Section 9: Physical and Chemical Properties

Appearance	Colourless / Yellowish. Clear. Liquid		
Odor	Characteristic.		
Odor Threshold	Not available.		
Melting Point	Not available	pH	< 1.2 (@25 °C)
Freezing Point	Not available.	Vapor Pressure	Not available
Boiling Point/Range	120-130 °C / 249-266 °F (Vapor Density	Not available.
Decomposition temperature	> 200 °C / > 392 °F	Viscosity	5-60 mPa*s @ 25°C
Partition Coefficient: n-octanol/water	-0.62	Evaporation Rate	Not available.
Flash Point	Not available.	Autoignition temperature	> 400 °C / > 752 °F (solution 93
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	Not available		
Other	Surface tension 44-50 mN/m (@ 50-90%)		

Section 10: Stability and Reactivity

Reactivity	Not available.
Chemical Stability	Stable under recommended storage conditions.
Hazardous Polymerization	Not available.
Conditions to Avoid	Avoid temperatures above 200 °C (392°F).
Incompatible Materials	Oxidizing agents
Hazardous Decomposition Products	Not available.

Section 11: Toxicological Information
RTECS OD2800000

Acute Toxicity

Ingestion No known effect. Skin contact No known effect (LD50 Dermal, Rabbit: >2000 mg/kg). Inhalation No known effect LD50 Oral: 3543 mg/kg (Rat, female) 4936 mg/kg (Rat, male) LD50 Dermal: >2000 mg/kg (Rabbit) LC50 Inhalation: >7.94 mg/L (Rat) 4h mist

Skin Corrosion/Irritation

Causes skin irritation.

Serious Eye Damage/Irritation

Causes serious eye damage.

Respiratory or Skin Sensitization

Not available.

Germ Cell Mutagenicity

Not known to cause heritable genetic damage

Carcinogenicity

Contains no ingredient listed as a carcinogen.

Reproductive Toxicity

Not known to cause birth defects or have a deleterious effect on a developing fetus. Not known to adversely affect reproductive functions and organs.

Routes of Entry

Eye contact. Inhalation. Ingestion.

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Symptoms Related to Exposure

Not available.

Potential Health Effects

Not available.

Target Organ(s)

Not available.

Section 12: Ecological Information**Ecotoxicity**

Contains no substances known to be hazardous for the environment.

Persistence and Degradability

Readily biodegradable

Bioaccumulative Potential

Does not bioaccumulate

Mobility in Soil

Not available.

Other Adverse Effects

Not available.

Section 13: Disposal Considerations**Waste Disposal**

Dispose of in accordance with local regulations

Disposal of Container

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other Considerations

Not available.

Section 14: Transport Information**DOT Classification**

Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information**Regulations**

Restrictions on use None. Other Regulations No information available.

Other

HMIS ratings: Health:1 Flammability: 0 Physical hazard:0 NFPA ratings: Health: 1 Flammability: 0
Instability:0

Section 16: Other Information

This Information only concerns the above - mentioned product and is not valid if used with other product(s) or In any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.