

AERCHEM INC.
400 W. 7th Street, Suite 112
Bloomington, IN 47404

Telephone: 812.334.9996

Fax: 812.334.1960

Emergency: 800.424.9300

Effective Date: 10/95

Product Name: Lactic Acid 88% USP/FCC

Chemical Formula: CH₃CHOCHOH

Molecular Weight: 90.08

CAS No.: 79-33-4

Hazardous Ingredients: None. Health injuries are not known or expected under normal use.

Physical Data:

Boiling point:	230°F(40% solution), 257°F (90% solution)
Specific Gravity (Water=1):	1.12-1.23 g/ml 20°C
SARA 313 listed:	No
Solubility in water:	Soluble
Odor:	Characteristic
Physical Form:	White to slightly yellow liquid
Vapor pressure:	Not available
Density:	1190-1250 Kg/m ³
Melting Point:	<0.1%
Evaporation Rate:	<1 (Butyl Acetate=1)

Fire and Explosion Information:

Flash point:	>100°C closed cup
(Auto) Ignition temperature:	None
Explosion Limits:	Lower-not applicable Upper-not applicable
Extinguishing media to be recommended:	Dry chemical, carbon dioxide, water spray or regular foam
Special fire and explosions precautions:	No special precautions required

Stability:

Stable at normal conditions

Conditions to avoid:

Avoid temperatures above 200°C/392°F

Materials to Avoid:

Oxidizing Agents

Hazardous Decomposition:

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Polymerization:

Has not been reported to occur under normal conditions.

Handling and Storage Information:

Keep container tightly closed, store in cool, dry ventilated area and avoid temperatures above 200°C/392°F.

Handling Information: Avoid eye and skin contact. If contact, wash with water and soap.

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A. Personal Protection:

Ventilation: Under normal conditions, good ventilation should be sufficient.
Skin Contact: Light weight protective clothing is recommended, but not necessary. The use of rubber gloves is also recommended, but not necessary.
Eye Contact: Wear face-shield or safety glasses.

Health Hazard:

Route of Entry: Inhalation and skin
Skin: May cause irritation with redness.
Eye : May cause irritation with redness, pain and tearing
Ingestion: Large amounts may cause gastrointestinal irritation with burning of the mouth.

Chronic Exposures:

Inhalation: May cause gastro-intestinal disturbances, bronchial irritation with chronic cough.
Skin: Repeated and prolonged contact may cause dermatitis.
Eye Contact: Repeated and prolonged contact may cause conjunctivitis.
Ingestion: The food and drug administration lists Lactic Acid as a direct food substance affirmed as generally recognized as safe.

B. First Aid:

Inhalation: Move to fresh air
Eye Contact: Rinse immediately with plenty of water, also under the eyelids for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Ingestion: Drink plenty of water. Do not induce vomiting, call a physician.
Major effects of exposure: May cause irritation of respiratory tract. May cause eye/skin irritation.

C. Toxicity Data

LD50/oral/rat=3730 mg/Kg
LD50/oral/mouse=4875 mg/Kg
LD50/dermal/rabbit 2000MG/Kg
Carcinogenicity: None
Mutagenicity: None
Ecology:
Mobility: Completely Soluble
Persistence/degradability: Readily biodegradable according to appropriate OECD test.
Biochemical oxygen demand(BOD)₅=0.45 mg O₂/mg
Biochemical oxygen demand (BOD)₂₀=0.60 mg O₂/mg
Chemical oxygen demand(COD)=0.90 mg O₂/mg
Bioaccumulation: None
Ecotoxicity: EC50/48h/Daphnia=240 mg/l
LC50/48h/Fish=320mg/l
EC50/Algae=3500mg/l(neutral)
Further information: Natural Product

NFPA Rating: Health=2 Fire=0 Reactivity=0

HMIS Ratings: Health=2 Fire=0 Reativity=0 Protection=3
