Material Safety Data Sheet
DL-LACTIC ACID

1: Chemical Product and Company Identification

Product Name: DL-LACTIC ACID
Catalog Code: 705711
CAS#: 598-82-3
RTECS: OD2800000
TSCA: TSCA 8(b) inventory: DL-Lactic acid
Cl#: Not available.
Synonym: Ethylenelactic acid; 1-Hydroxyethanecarboxylic acid; E-mail: save@bio-world.com; 2-Hydroxypropanoic acid; 2-Hydroxypropionic acid; alpha-Hydroxypropionic acid; DL-Lactic acid; Milk acid; Ordinary lactic acid; Propanoic acid, 2-hydroxy-; Prop; Propionic acid, 2-hydroxy--; Racemic lactic acid; SY-83.
Contact information:
bioWORLD
4150 Tuller Rd
Suite 228, Dublin, OH 43017, USA
For information, call: 614-792-8680
Fax Number: 614-792-8685
Order Online: www.bio-world.com

Chemical Name: DL-Lactic acid
Chemical Formula: C₃H₆O₃

2: Composition and Information on Ingredients

Composition:
Name: DL-LACTIC ACID
CAS#: 598-82-3
% by Weight: >85

Toxicological Data on Ingredients:
LD₅₀ (Oral, Rat): 3543 mg/kg
LD₅₀ (Oral, Mouse): 4875 mg/kg
LD₅₀ (Skin, Rabbit): > 2000 mg/kg

3: Hazards Identification

Potential Acute Health Effects: Irritant.
Irritating to skin. Risk of serious damage to eyes.

Potential Chronic Health Effects:

In case of a chemical emergency, contact local hospital.
For non-emergency assistance, call: 1-800-860-9729
CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.

4: First Aid Measures

Eye Contact: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Serious Inhalation: Not available.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Serious Ingestion: Not available.

5: Fire and Explosion Data

Flammability of the Product: Noncombustible.

Auto-Ignition Temperature: Not available.

Flash Points: 112.77 °C (235 °F)

Flammable Limits: Not available.

Product of Combustion: Carbon monoxide, Carbon dioxide.

Fire Hazards In Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances:
Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Dry chemical powder.

LARGE FIRE: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

6: Accidental Release Measures

Small Spill: Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Large Spill: Not available.
7: Handling and Storage

Precautions: Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage: Keep tightly closed.

8: Exposure Controls/Personal Protection

Engineering Controls: Mechanical exhaust required. Safety shower and eye bath.

Personal Protection: Respiratory: Government approved respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.


Exposure Limits: Not available.

9: Physical and Chemical Properties

Physical State and Appearance: Liquid.

Odor: Not available.
Taste: Not available.

Molecular Weight: 90.08 g/mole
Color: Colorless.

pH(1% soln/water): Not available.

Boiling Point: Not available.
Melting Point: Not available.
Critical Temperature: Not available.
Specific Gravity: 1.209
Vapour Pressure: Not available.
Vapor Density: Not available.
Volatility: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available.
Solubility: Not available.

10: Stability and Reactivity Data
Stability: Stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Bases, Oxidizing agents, Reducing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Routes of Entry: Skin contact. Eye contact. Ingestion. Inhalation.

Toxicity to Animals:

LD₅₀ (Oral, Rat): 3543 mg/kg
LD₅₀ (Oral, Mouse): 4875 mg/kg
LD₅₀ (Skin, Rabbit): > 2000 mg/kg

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Skin Contact: Causes skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: Causes severe eye irritation. Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. Ingestion: Ingestion can cause immediate burning pain in the mouth, throat, abdomen; severe swelling of the larynx and skeletal paralysis affecting the ability to breathe, circulatory shock and convulsions.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Ecotoxicity: Not available.

BOD₅ and COD: Not available.

Product of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Waste Disposal: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the
material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14: Transport Information

DOT Classification: Not a DOT controlled material.
Identification: Not available.
Special Provisions for Transport: Not available.

15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: DL-Lactic acid

Other Regulations: EU ADDITIONAL CLASSIFICATION
Symbol of Danger: Xi
Indication of Danger: Irritant.
R: 38 41
Risk Statements: Irritating to skin. Risk of serious damage to eyes.
S: 26 39
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

Other Classifications:
WHMIS (Canada): Not available.
DSCL (EEC): Not available.
HMIS (U.S.A):
Health Hazard: 2
Fire Hazard: 0
Reactivity: 0

Personal Protection:

National Fire Protection Association (U.S.A):
Health: 2
Flammability: 0
Reactivity: 0
Specific hazard:

Protective Equipment: Gloves, Lab coat, Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety goggles.

16: Other Information

References: Not available.
Other Special Considerations: Not available.
Disclaimer

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