



## Material Safety Data Sheet Lactic Acid Solutions

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Lactic Acid Solutions

**Catalog Numbers:**

LC15950, LC16000, LC16020

**Synonyms:**

None

**Company Identification:**

LabChem Inc  
200 William Pitt Way  
Pittsburgh, PA 15238

**Company Phone Number:**

(412) 826-5230

**Emergency Phone Number:**

(800) 424-9300

**CHEMTREC Phone Number:**

(800) 424-9300

### Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
50-21-5	Lactic acid	9 - 85

### Section 3 - Hazards Identification

#### Emergency Overview

**Appearance:** *Clear colorless to slightly yellow solution*

**Caution!** May cause eye, skin, and respiratory tract irritation. May cause digestive tract irritation with nausea, vomiting, and diarrhea.

**Target Organs:** *Blood, kidneys, eyes, skin, respiratory system*

#### Potential Health Effects

**Eye:**

Causes eye irritation or burns. Risk of serious damage to eyes.

**Skin:**

Causes skin irritation or burns with irritation, redness, burns, blisters, and brown or yellow stains.

**Ingestion:**

May cause severe irritation to gastrointestinal tract with burning of the mouth, vomiting, and diarrhea.

**Inhalation:**

Lactic acid, 85%--may cause severe irritation to the respiratory tract with coughing, headache, dizziness, shortness of breath.



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### **Chronic:**

Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects.

## Section 4 - First Aid Measures

### **Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once. Cover burns with loose sterile non-medicated bandages.

### **Skin:**

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

### **Ingestion:**

Get medical aid at once. Give oxygen if respiration is depressed. Do not induce vomiting. If victim is conscious, give 2-4 glasses of water to dilute acid. Never give anything by mouth to an unconscious person.

### **Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

### **Notes to Physician:**

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

### **General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Move container if possible; avoid breathing vapors or dust.

### **Extinguishing Media:**

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

### **Autoignition Temperature:**

Not available

### **Flash Point:**

>110°C (>230°F)

### **NFPA Rating:**

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

CAS# 50-21-5: Health- 2, Flammability- 1, Instability- 1.

### **Explosion Limits:**

Lower: n/a Upper: n/a



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### Section 6 - Accidental Release Measures

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Absorb spill with inert material (vermiculite, sand, earth), and then place in a suitable container.  
Provide ventilation.

### Section 7 - Handling and Storage

**Handling:**

Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:**

Store tightly closed in a cool, dry place or in a corrosives storage area. Do not store in metal containers.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits:**

Chemical Name:	ACGIH	NIOSH	OSHA
Water	none listed	none listed	none listed
Lactic acid	none listed	none listed	none listed

**OSHA Vacated PELs:**

None.

**Personal Protective Equipment****Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:**

Wear appropriate gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.  
Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

**Physical State:** Liquid  
**Color:** Clear, colorless to slightly yellow  
**Odor:** Odorless to slightly acrid



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<b>pH:</b>	2.8 (1% w/v soln.)
<b>Vapor Pressure:</b>	Not available
<b>Vapor Density:</b>	Not available
<b>Evaporation Rate:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	100 - 122°C (212 - 252°F)
<b>Freezing/Melting Point:</b>	0 - 17°C (32 - 63°F)
<b>Decomposition Temperature:</b>	Not available
<b>Solubility in water:</b>	Soluble
<b>Specific Gravity/Density:</b>	1.0 - 1.2
<b>Molecular Formula:</b>	Not applicable
<b>Molecular Weight:</b>	Not applicable

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

Incompatible materials, excess heat, temperatures above 200°C.

**Incompatibilities with Other Materials:**

Metals, strong oxidizing agents, strong reducing agents, strong bases, nitric acid, iodides.

**Hazardous Decomposition Products:**

Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:**

Has not been reported.

### Section 11 - Toxicological Information

**RTECS:**

CAS# 7732-18-5: ZC0110000.

CAS# 50-21-5: OD2800000.

**LD50/LC50:**

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 50-21-5:

Oral, mouse: LD50 = 4875 mg/kg

Oral, rat: LD50 = 3543 mg/kg

Skin, rabbit: LD50 = >2 gm/kg.

**Carcinogenicity:**

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 50-21-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

**Epidemiology:**

No information found

**Teratogenicity:**

No information found

**Reproductive:**

Adverse reproductive effects have occurred in experimental animals.

**Mutagenicity:**

Mutagenic effects have occurred in experimental animals.



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### Neurotoxicity:

No information found

## Section 12 - Ecological Information

No information found

## Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

## Section 14 - Transport Information

### US DOT

<10%

10-85%

<b>Shipping Name:</b>	Not regulated.	Corrosive liquid, acidic, inorganic, nos. (Lactic Acid)
<b>Hazard Class:</b>		8
<b>UN Number:</b>		UN3265
<b>Packing Group:</b>		PGIII

## Section 15 - Regulatory Information

### US Federal

#### TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 50-21-5 is listed on the TSCA Inventory.

#### SARA Reportable Quantities (RQ):

None of the components are on this list.

#### CERCLA/SARA Section 313:

None of the components are on this list.

#### OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

### US State

#### State Right to Know:

None of the components are on this list.

#### California Regulations:

None.

### European/International Regulations

#### Canadian DSL/NDL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 50-21-5 is listed on Canada's DSL List.

#### Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 50-21-5 is listed on Canada's Ingredient Disclosure List.



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### Section 16 - Other Information

MSDS Creation Date: May 6, 1998

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