

Humco Holding Group, Inc.
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Texarkana, TX 75501
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Item#0395-1500

Lactic Acid 88% USP/FCC

Date Prepared: 04/10/07

SECTION 1

PRODUCT IDENTIFICATION

Product Name: Lactic Acid 50% FCC
solution

Chemical Name: L(+) Lactic Acid aqueous

Lactic Acid 80% FCC

Molecular Wt.: 90.08

Lactic Acid 88% FCC

Chemical Characterization: C₃H₆O₃

Lactic Acid 88% USP

CAS No.: 50-21-5 (Lactic Acid)

79-33-4 L(+) Lactic Acid

Product Use: Organic acid used in food, pharmaceutical and industrial applications.

Emergency Telephone Numbers:

Humco Holding Group 800-662-3435

Chemtrec 800-424-9300

SECTION 2

COMPONENTS

<u>Components</u>	<u>CAS No.</u>	<u>Percent</u>
Lactic Acid 50% FCC	50-21-5	50% & Water q.s. 100.
Lactic Acid 80% FCC	50-21-5	80% & Water q.s. 100.
Lactic Acid 88% FCC	50-21-5	88% & Water q.s. 100.
Lactic Acid 88% USP	50-21-5	88% & Water q.s. 100.

Hazardous Impurities: None

SECTION 3

HAZARDS IDENTIFICATION

Emergency Overview: Syrupy colorless to yellowish liquid, nearly odorless.

Most Important Hazard: Inhalation or skin contact may cause irritation.

Inhalation: May cause irritation with coughing.

Eye Contact: May cause irritation with redness, pain and tearing

Skin Contact: May cause irritation with redness.

Acute oral intake: Large amounts may cause gastrointestinal irritation with burning of the mouth.

Chronic: May cause gastrointestinal disturbances, bronchial irritation with chronic cough.

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Carcinogen Status: None

HAZARD RATING SYSTEMS

	KEY	
Health	1	4 = Severe
Flammability	0	3 = Serious
Reactivity	0	2 = Moderate
		1 = Slight
		0 = None

SECTION 4

FIRST AID MEASURES

General Advice: No hazards which require special first aid measures. If you fell unwell, seek medical advice.

Ingestion: Drink water as a precaution. Do not induce vomiting. Consult a physician if necessary.

Inhalation: Remove to fresh air. Call a physician.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

Eye Contact: In case of eye contact, immediately flush with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. If eye irritation persists, call a specialist.

Protection of first-aiders: Use personnel protection to avoid skin and eye contact.

SECTION 5

FIRE FIGHTING MEASURES

Flash Point: NA aqueous

Autoignition Temperature: NA

Flammable Limits: NA

General: Material is not considered flammable but the residue may burn in presence of strong ignition source after the water has been evaporated.

Extinguishing Media: Water, water spray, dry powder, foam, carbon dioxide (CO₂)

Extinguishing Media which must not be used for safety reasons: None

Hazardous Decomposition Products: Carbon oxides

Special Protective Equipment: Use personal protective equipment including self-contained breathing apparatus when fighting fire in enclosed area.

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Specific Methods: Standard procedures for chemical fires.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Avoid skin and eye contact. Avoid breathing of vapors and aerosols. Use NIOSH acid approved respirator if necessary.

Methods for Cleaning Up: Contain spill or leak to prevent discharge to the environment. Cover spill with soda ash. Scoop neutralized waste into recovery containers, plastic or plastic coated. Flush area with water to remove final traces.

Environmental Precautions: Dispose according to federal, state and local authorities. Consider landfill or flushing to drain after pH adjustment to acceptable range.

SECTION 7

HANDLING & STORAGE

Technical Measures/Precautions for Handling: Provide eye wash and emergency shower near handling stations.

Safe Handling Advice: Avoid skin and eye contact, avoid breathing vapors.

Technical Measures/Storage Conditions: Keep tightly closed in a dry and cool place.

Incompatible products: Avoid nitric and hydrofluoric acids.

Packaging Material: Store in original container.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: Provide general dilute ventilation.

Exposure Limits: None established

Respiratory Protection: NIOSH approved for acid vapor.

Hand protection: Impervious gloves.

Eye Protection: Chemical goggles/face shield.

Skin and body protection: Impervious apron and impervious foot protection.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid.

Odor: Virtually odorless.

Color: colorless to pale yellow

pH: NA

Solubility: g/kg miscible

Explosive Properties: NA

pH: NA

Melting Point: NA

Boiling Point: 230°F 40% solution

257°F 90% solution

Vapor Density (Air=1): NA

Evaporation Rate (BuAc=1): NA

Vapor Pressure: @ 190°C 30 mm
Unknown

Coefficient of Water/Oil Distribution:

Relative Density: 9.9 to 10.4 lb/gal depending on concentration

SECTION 10**STABILITY & REACTIVITY**

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: No decomposition if stored normally. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Polymerization: Has not been reported under normal conditions.

Material to Avoid: Most metals, nitric acid, hydrofluoric acid.

Conditions to Avoid: Keep containers tightly closed, store in cool, dry ventilated area and avoid temperatures above 392°F.

SECTION 11**TOXICOLOGICAL INFORMATION**

Acute Toxicity: LD50/oral/rat = 3720 mg/kg
LD50/oral/mouse = 4875 mg/kg
LD50/dermal/rabbit = 2000 mg/kg

Local effects: Skin and eye irritation available.

Chronic Toxicity: No data

Human Experience: Health injuries are not known or expected under normal use.

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SECTION 12**ECOLOGICAL INFORMATION**

Mobility: Completely soluble.

Persistence & Degradability: Readily biodegradable according to appropriate OECD test

Chemical Oxygen Demand: COD = 0.90 mg/O₂/mg

Biochemical oxygen demand within 5 days: (BOD₅) = 0.45 mg/O₂/mg

Bioaccumulation: None

Ecotoxicity Effects: EC50 (48h/Daphnia) = 240 mg/l
LC50 (48h/fish) = 320 mg/l
EC50 (algae) = 3500 mg/l (neutral)

SECTION 13 **DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused Products: Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules).

SECTION 14 **TRANSPORTATION DATA & ADDITIONAL INFORMATION**

-----**Domestic (Land, D.O.T.)**

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Proper Shipping Name: Corrosive Liquid NOS (Lactic Acid)

UN/NA: UN1760

Hazard Class: 8

Packaging Group: III
NOS

Label: Corrosive Liquid

Water 12%

CAS No.: 7732-18-5

SECTION 15 **REGULATORY INFORMATION**

Lactic acid is generally regarded as safe (GRAS) by USA FDA. 29 CFR 184.1061

The ingredients are listed on the TSCA Inventory List.

CERCLA (Comprehensive Response Compensation, and Liability Act):

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HMIS

HAZARD RATING SYSTEMS

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		0 = None

SARA Title III (Superfund Amendments and Reauthorization Bill): Not section 313 listed.

Foreign Inventory Status

Canadian DSL (Domestic Substance List)