


Safety Data Sheet

Section 1. Identification	
Product Identification and Item Numbers:	Lactic Acid, Racemic, USP (LA/4, LA/8)
Product Description:	A pure, racemic solution of lactic acid.
Recommended use and restrictions on use:	N/A
Supplier:	Delasco 608 13 th Avenue Council Bluffs, IA 51501 1-712-323-3269 www.delasco.com questions@delasco.com
In Case of Emergency, Contact:	Chemtrec (24 hour) 1-800-424-9300

Section 2. Hazard(s) Identification	
Classification:	
Serious eye damage/irritant (Category 1) Skin corrosion/irritation (Category 1) Corrosive to metals (Category 1)	
Labeling:	
Hazard symbol(s):	
 GHS05: corrosive	
Signal word: Danger!	
Hazard statements:	
H290: May be corrosive to metals H303: May be harmful if swallowed H314: Causes severe skin burns and eye damage	
Precautionary statements:	
P234: Keep only in original container P260: Do not breathe dust/fumes/gas/mist/vapors/spray P264: Wash face, hands and any exposed skin thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+P310+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER/doctor. P303+361+353+P363: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse P304+P312+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P405: Store locked up P406: Store in a corrosive resistant container with a resistant inner liner. P501: Dispose of in accordance with federal, state and local environmental control regulations.	

Section 3. Composition/Information on Ingredients	
Chemical Name and Concentration:	Lactic acid
Other Names, Common Names, Synonyms:	2-Hydroxypropanoic Acid; 2-Hydroxypropionic Acid; Racemic lactic acid; Ordinary lactic acid; Propanoic acid, 2-hydroxy-; DL-Lactic Acid; (+-)-Lactic Acid; Lactic Acid is a mixture of Lactic Acid (C ₃ H ₆ O ₃) and Lactic Acid Lactate (C ₆ H ₁₀ O ₅)
CAS Number, other unique identifiers:	CAS# 50-21-5
Other classified impurities or stabilizers:	N/A
Other ingredients posing health hazards:	N/A
Concentration of other hazardous ingredients:	N/A

Section 4. First-aid Measures	
Inhalation exposure:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin exposure:	Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
Eye contact:	Flush eye with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Section 5. Fire Fighting Measures	
Suitable / unsuitable extinguishing media:	Suitable Media: Dry chemical. Carbon dioxide (CO ₂). Water spray, mist or foam. Unsuitable Media: N/A
Specific hazards / combustion products:	May be combustible at high temperatures May be ignited by heat, sparks or flames Container explosion may occur under fire conditions or when heated Combustion Products: Carbon oxides
Special protective equipment and precautions for fire-fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
NFPA Hazard Classification	Health – 3 Flammability – 1 Instability – 0 0-Minimal 1-Slight 2-Moderate 3-Serious 4-Severe

Section 6. Accidental Release Measures	
Personal precautions and protective equipment:	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not get water inside containers.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.
Containment / clean up methods:	Containment: Stop leak if you can do it without risk. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal. Clean Up: Dilute with water. Neutralize with Sodium carbonate or Sodium bicarbonate. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

Section 7. Handling and Storage	
Precautions for safe handling:	Provide sufficient air exchange and/or exhaust in work rooms. All equipment used when handling the product must be grounded. Keep away from incompatible materials. Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage:	Hygroscopic. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. May corrode metallic surfaces. Do not store in uncoated metallic containers. Store away from incompatible materials.
Incompatibilities to avoid:	Oxidizing agents. Bases. Metals. Reducing agents.

Section 8. Exposure Controls and Personal Protection	
OSHA Permissible Exposure Limit (PEL):	None
Threshold Limit Value (TLV):	None
Other exposure limits:	None
Engineering controls:	Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.
Personal protective equipment:	Eye protection: Goggles Skin and body protection: Chemical resistant apron. Long sleeved clothing. Gloves. Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.
Other personal protection measures:	Provide nearby eyewash station and safety shower.

Section 9. Physical and Chemical Properties	
Appearance (physical state, color, etc.):	Syrupy, viscous liquid.
Odor:	Slightly acidic
Odor threshold:	Data not available
pH:	Data not available
Melting point / freezing point:	16.8°C/62.2°F
Initial boiling point and boiling range:	122°C/251.6°F @ 14-15 mmHg
Flash point:	112.78°C/235°F
Evaporation rate:	Data not available.
Flammability	Data not available.
Upper / lower flammability or explosive limits:	Data not available.
Vapor Pressure:	0 kPa @ 25°C
Vapor density:	Data not available.
Relative density:	Data not available.
Solubility:	Partially soluble in diethyl ether Practically insoluble in Chloroform Practically insoluble in Petroleum Ether Practically insoluble in carbon disulfide Soluble in Alcohol Soluble in cold water Soluble in Furfuro Soluble in hot water
Partition coefficient: n-octanol/water:	-0.7
Auto-ignition temperature:	Data not available.
Decomposition temperature:	Data not available.
Viscosity:	Data not available.

Section 10. Stability and Reactivity	
Chemical stability:	Reactive with alkalis Reactive with oxidizing agents Hygroscopic. Stable under recommended storage conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur
Conditions to avoid (static, shock, vibration...)	Heat. Ignition sources. Incompatible materials. Exposure to moisture.
Incompatible materials:	Oxidizing agents. Bases. Metals. Reducing agents.
Hazardous decomposition products:	Carbon oxides
Corrosivity:	Slightly corrosive in the presence of aluminum, of copper Slightly corrosive in presence of stainless steel (304) Slightly corrosive in presence of stainless steel (316) Minor corrosive effect on bronze Severe corrosive effect on Brass

Section 11. Toxicological Information	
Routes of exposure:	Ingestion, inhalation, skin and/or eye contact.
Acute Symptoms (acute):	<p>Inhalation: Causes severe respiratory tract and mucous membrane irritation with possible burns. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. Other symptoms may include shortness of breath, coughing, and sore throat.</p> <p>Eye Contact: Causes severe eye irritation and possible burns. May cause conjunctivitis. May cause corneal damage.</p> <p>Skin Contact: Severe skin irritation. May cause burns. It can be absorbed through the skin.</p> <p>Ingestion: May be harmful if swallowed. May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, and possible burns (in the throat, mouth, and stomach). May cause severe and permanent damage to the digestive tract. May cause perforation of the digestive tract. May also cause shortness of breath and in severe cases may produce cyanosis and vascular collapse.</p>
Symptoms (chronic): Chronic effects from short and long term exposure:	The Registry of Toxic Effects of Chemical Substance (RTECS) notes that during animal testing that the prolonged/repeated administration of Lactic on the skin of rats affected the urinary system and blood.
Numerical measures of toxicity (e.g., acute toxicity estimates):	<p>Product Information</p> <p>LD50/oral/rat VALUE- Acute Tox Oral = 3543mg/kg</p> <p>LD50/oral/mouse Value - Acute Tox Oral = 4875mg/kg</p> <p>LD50/dermal/rabbit VALUE-Acute Tox Dermal = >2000mg/kg</p> <p>LD50/dermal/rat VALUE -Acute Tox Dermal = No information available</p> <p>LC50/inhalation/rat</p> <p>VALUE-Vapor = No information available</p> <p>VALUE-Gas = No information available</p> <p>VALUE-Dust/Mist = >7940mg/m3 (4-hr.)</p> <p>LC50/Inhalation/mouse</p> <p>VALUE-Vapor = No information available</p> <p>VALUE - Gas = No information available</p> <p>VALUE - Dust/Mist = No information available</p>
NTP carcinogen:	Not listed
EPA carcinogen:	No data available
ACGIH carcinogen:	Not listed
IARC potential carcinogen:	Not listed
OSHA carcinogen:	Not listed

Section 12. Ecological Information (Non-mandatory)	
Ecotoxicity (aquatic and terrestrial, where available):	No data available.
Persistence and degradability:	No data available
Bioaccumulative potential:	Potential for bioconcentration in aquatic organisms is low.
Mobility in soil:	No data available
Other adverse effects:	N/A

Section 13. Disposal Considerations (Non-mandatory)**Safe methods of disposal:** Dispose of in accordance with federal, state and local environmental control regulations.**Section 14. Transport Information (Non-mandatory)**

US DOT	UN number:	UN3265	Class:	8	Packing Group:	III
UN proper shipping name:		Corrosive liquid, acidic, organic, n.o.s (Lactic Acid)				
Packing group, if applicable:		III				
Environmental hazards (marine pollutant, etc...)		Not available				
Special transport precautions:		N/A				

Section 15. Regulatory Information (Non-mandatory)

Specific safety, health, and environmental regulations:	N/A
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Section 16. Other information

Date of preparation or last revision:	September 18, 2018
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