

Material Safety Data Sheet.

1. IDENTIFICATION

Product Identifier: Lactic Acid 88% Excel

Other Means of Identification:

Synonymes: L-(+)-Lactic acid, (S)-2-Hydroxypropanoic acid, (S)-Lactic acid
(S)-2-Hydroxypropionic acid, Galacid Excel 88

Chemical Formula: C₃H₆O₃

Chemical Family: Organic acids

CAS Number: 79-33-4

Recommended Use: Nutritional supplement, food additive, other approved uses.

Restrictions on Use: No information available.

Initial Supplier Identifier: Gurvey & Berry Co. Inc.
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2. HAZARD IDENTIFICATION

GHS Classification in accordance with Hazardous Products Regulations (HPR) OR/2015-17)

Hazard class	Hazard class and category	Hazard statement
Skin corrosion/irritation	1	H314
Serious eye damage/eye irritation	1	H318
Acute toxicity oral	4	H302



Pictograms:

Signal word:

Danger!

Warning!

Hazard statements

H314 Causes skin corrosion.
H318 Causes serious eye damage.
H335 Harmful if swallowed.

Precautionary statements – prevention.

P260 Do not breathe mist or vapors.
P264 Wash hands, face and any exposed skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/clothing and eye/face protection.
P270 Do not eat, drink, or smoke when using this product.

Precautionary statements – response

P310 Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair):
Take off Immediately all contaminated clothing.
Wash SKIN with plenty of water (or shower).

P310 Immediately call a POISON CENTER or doctor/physician.
P363 Wash contaminated clothing before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTER or doctor/physician.

Precautionary statements - storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary statements - disposal

P501 Dispose of contents/container to approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Lactic Acid	79-33-4	87.5 % – 88.5%	See section 1	

Notes: Aqueous solution.

4. FIRST-AID MEASURES

First aid measures by route of exposure:

General:	Move out of dangerous area. Remove any contaminated clothing. Consult a physician and show this safety data sheet.
After Eye Contact:	Get medical aid immediately. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub eyes or keep them closed.
After Skin Contact:	Get medical aid immediately. Flush skin with soap and water at least 15 minutes while removing contaminated clothing and shoes.
After Ingestion:	Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
After Inhalation:	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical aid.

Most Important Symptoms and Effects, Acute and Delayed:

Symptoms/effects after skin contact: Causes skin burns. Redness, swelling and pain.

Symptoms/effects after eye contact: Causes eye burns. Causes redness and pain, tearing.

Symptoms/effects after ingestion: May cause gastrointestinal tract tissue burns. May cause headache, abdominal pain, nausea, vomiting.

Symptoms/effects after inhalation of dust: Coughing. Irritation of the respiratory tract

Medical Conditions Aggravated By Exposure: N/A

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

In case of fire use water spray or mist, dry chemical, chemical foam, or alcohol-resistant foam, or carbon dioxide.

Unsuitable Extinguishing Media: Do not use water jet.

Special Hazards Arising from the Product:

Decomposition Products – Nitrogen oxides, carbon monoxide, and carbon dioxide.

Special Protective Equipment and Precautions for Fire-Fighters:

As in any fire, wear a self-contained breathing apparatus and full protective gear.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Further information. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Communicate hazard.

Evacuate unprotected personnel to safe areas.

Wear personal protective equipment. (see section 8).

Remove all sources of ignition.

Ensure adequate ventilation. Avoid breathing vapours.

Prevent further leak or spill if safe to do so.

Wash hands and skin thoroughly with soap and water after handling this material.

Methods and materials for containment and cleaning up

Spill

Wear Personal protective equipment (see section 8).

Prevent further spillage if safe to do so.

Absorb the spill with sorbent pads, vermiculite, dry sand, or earth.

Use designated, labeled, closed waste containers for disposal.

Wash non recoverable remainder with large amount of water.

Finish cleaning by spreading water on the contaminated surface and allowing to evacuate through the sanitary system.

Dispose of containers in accordance with local, regional, and federal authority requirement.

Environmental precautions

Do not let product enter drains and ground.

Reference to other sections

See section 1 for emergency contact.

See section 8 for information on appropriate personal protective equipment.

See section 13 for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Always wear personal protective equipment (see section 8)
Avoid contact with eyes, skin, and clothing.
Avoid ingestion and inhalation.
Use with adequate ventilation.
For precautionary statements see also section 2.2

Wash hands thoroughly after handling.
Do not eat, drink, or smoke in the area.

Conditions for Safe Storage: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Protect from heat and sunlight. Keep away from ignition sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL	TWA	STEL
	N/A	N/A	N/A	N/A

Appropriate Engineering Controls: Local (or general) exhaust ventilation is required.
Eyewash station and safety shower required.

Personal Protection Measures (e.g. personal protective equipment):

Eye/face protection Safety glasses with side-shields for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN (EU).

Skin and body protection Full body protective clothing, boots, gloves. Handle with gloves compatible with this material. Gloves must be inspected prior to use.

Respiratory protection If operations generate fume, or mist, use local ventilation or other appropriate Engineering controls to keep exposure contaminants below the exposure limit. Be sure to use approved /certified respirator, such as aerosol mask with filter type P2.

Control of environmental exposure Do not let product enter drains or ground.

N/A

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form:	Viscous Liquid
Color:	Colorless
Molecular Weight:	90.08 g/mol
Odour:	Odourless
Odour Threshold:	N/A
pH:	<2 (25C)
Melting Point/freezing point:	53C (crystalline lactic acid)
Initial boiling point/boiling range:	105 - 150C
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability (solid; gas):	Not flammable
Upper flammability or explosive limits	N/A
Lower flammability or explosive limits	N/A
Vapor Pressure (mmHg):	Negligible
Vapor Density (air=1):	N/A
Relative Density:	1.04 – 1.25
Solubility in Water:	Soluble
Solubility in Other Agents:	Alcohol
Partition coefficient (n-octanol/water)	-0.72 (20C)
Autoignition	400C
Decomposition	>200C
Viscosity	5-60 mPa s
Explosive properties	N/A
Oxidizing properties	N/A
Other information:	N/A

10. STABILITY AND REACTIVITY

Reactivity hazard:	Yes
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Can react violently with strong oxidizing agents, bases, strong inorganic acids.
Conditions to avoid:	High temperature, exposure to moist air.
Incompatible materials:	Metals, bases, strong inorganic acids (e.g. nitric acid), strong oxidizing agents, strong reducing agents, hydrogen peroxide.
Hazardous decomposition products:	formed under fire conditions – Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products	No data available
In the event of fire:	see section 5

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact:	Yes
Eye contact:	Yes
Ingestion:	Yes
Inhalation:	Yes

Acute Toxicity Oral LD₅₀:

RTECS Number	OD2800000
Chemical Name	Lactic acid
CAS Registry Number	50-21-5

Oral, mouse: LD₅₀ = 4875 mg/kg;
Oral, rat: LD₅₀ = 3543 mg/kg;
Oral, guinea pig LD₅₀ = 1810mg/kg
Inhalation, rodent- rat = LC₅₀ >7940mg/m³/4H

Skin corrosion/irritation: Causes skin corrosion.
pH < 2 (25C)
Draize test, rabbit, skin: 5 mg/24H Severe;
Draize test, rabbit, skin: 100 mg/24H Moderate;

Serious Eye Damage/irritation: Causes serious eye damage.
pH < 2 (25 C)
Draize test, rabbit, eye: 750 ug Severe;

Respiratory and/or Skin

Sensitization: N/A
Aspiration Toxicity: N/A
STOT (Specific Target Organ Toxicity)
Single Exposure: May cause respiratory irritation.
STOT (Specific Target Organ Toxicity)
Repeated Exposure: N/A

Carcinogenicity:

IARC Not listed
ACGIH® Not listed
OSHA Not listed
Reproductive Toxicity: N/A
Germ Cell Mutagenicity: N/A
Interactive Effects N/A

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available

Persistence and degradability:

Readily biodegradable.

Bioaccumulative potential:

Log p is -0.72 (25C)

Not Bioaccumulative.

Mobility in soil:

Small absorption.

Other adverse effects:

13. DISPOSAL CONSIDERATIONS

Wastes of Residues:

Package product wastes.

Close and label the waste receptacles and any unclean empty containers.

Dispose of according to local, provincial, and federal regulations.

Contaminated Packaging:

Do not reuse containers. Dispose of as unused product.

14. TRANSPORT INFORMATION

Not dangerous goods for transport. Keep separated from foodstuffs.

15. REGULATORY INFORMATION

CANADA DSL/NDSL: CAS # 79-33-4 is listed on the DSL.

16. OTHER INFORMATION

This information is based upon knowledge currently available.

More detailed information on the physical and chemical properties can be requested from the supplier. To the best of our knowledge, the information contained herein is accurate and complete. However, this should not be construed to imply any warranty or guarantee. Gurvey & Berry Co. Inc. shall not be held liable for any damage resulting from handling or from contact with the above chemical.

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This document will only be updated as needed.

N/A = not available.

N/D = not determined.