

---

**Material Safety Data Sheet**

---

Product Name	<b><u>L -(+) -Lactic Acid</u></b>
--------------	-----------------------------------

**Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identification:****Product Description:** L - (+) -Lactic Acid**Cat No. :** 20808, 96808, 98808, 10808,11808,50808,90808, 91808**Synonyms:** (S)-2- Hydroxy propionic acid Sarcolactic acid**CAS-No:** 79-33-4**EC-No.:** 201-196-2**Molecular Formula:** C<sub>3</sub> H<sub>6</sub> O<sub>3</sub>**REACH Registration No:** Not Applicable**1.2. Relevant identified uses of the substance or mixture and uses advised against:****Recommended Use:** Laboratory chemicals**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**  
184-186/P, Chacharwadi Vasna,  
Sarkhej-Bavla Highway,  
Ta.: Sanand, Dist.: Ahmedabad,  
Email: [info@finarchemicals.com](mailto:info@finarchemicals.com)  
Web: [www.finarchemicals.com](http://www.finarchemicals.com)
- **E-Mail Address** [safety@finarchemicals.com](mailto:safety@finarchemicals.com); [info@finarchemicals.com](mailto:info@finarchemicals.com)

**1.4. Emergency Telephone Number:**

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 – 40040085

**Material Safety Data Sheet**

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture:**

**Classification according to Regulation (EC) No 1272/2008**

Skin Irritation (Category 2), H315

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2. Label Elements:**

**Labeling according Regulation (EC) No 1272/2008**

**Pictogram**



**Signal word**

**Danger**

Hazard statement(s)

H315

Causes Skin Irritation.

H318

Causes serious eye damage.

Precautionary statement(s)

P280

Wear eye protection/ face protection.

P305 + P351 + P338 + P310

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.

P302 + P352

IF ON SKIN: Wash with plenty of water.

Supplemental Hazard

Statements

None

**2.3. Other Hazards:**

This substance/mixture contains no components considered to be either persistent, bioaccumulate and toxic (PBT), or very persistent and very bioaccumulate (vPvB) at levels of 0.1% or higher.

---

**Material Safety Data Sheet**

---

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances: L- (+) -Lactic Acid**

CAS-No: 79-33-4

**3.2. Mixtures:**

<b>Component</b>	<b>CAS-No</b>	<b>EC-No.</b>	<b>Weight %</b>
L -(+) -Lactic Acid	79-33-4	201-196-2	<= 100 %

**SECTION 4: FIRST AID MEASURES****4.1. Description of first aid measures:**

- **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

- **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

- **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

- **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

- **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2. Most important symptoms and effects, both acute and delayed:**

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

**4.3. Indication of any immediate medical attention and special treatment needed:**

No Data Available

---

**Material Safety Data Sheet**

---

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media:**

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2. Special hazards arising from the substance or mixture:**

Carbon oxides

**5.3. Advice for firefighters:**

Wear Self-contained breathing apparatus for firefighting if necessary.

**5.4 Further Information:**

No Information Available.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**6.2. Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3. Methods and material for containment and cleaning up:**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4. Reference to other sections:**

For disposal see Sections 13.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**7.2. Conditions for safe storage, including any incompatibilities:**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic

**Material Safety Data Sheet**

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**7.3. Specific end use(s):**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters:**

Components with workplace control parameters

**8.2. Exposure Controls:**

- **Appropriate Engineering Controls:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

- **Personal Protective Equipment:**

- **Eye & Face Protection-**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- **Skin Protection: -**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material : Nitrile rubber

Minimum layer thickness : 0.11 mm

Break through time : 480 min

Splash contact

Material : Nitrile rubber

Minimum layer thickness : 0.11 mm

Break through time : 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374,

---

**Material Safety Data Sheet**

---

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

- **Body Protection** –

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

- **Respiratory Protection-**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

- **Environmental Exposure Controls-**

Do not let product enter drains.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties:**

- **Physical State:** Solid
- **Odor:** No data available
- **pH:** 1.5-2.0
- **Melting Point:** 53 °C
- **Critical Temperature:** No data available
- **Vapor Pressure:** No data available
- **Vapor Density:** No data available
- **Volatility:** No data available
- **Bulk Density:** No data available
- **Odor Threshold:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Relative Density:** 1.200 g/cm<sup>3</sup>

---

**Material Safety Data Sheet**

---

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

- **Boiling Point/Range:** No data available
- **Flash Point:** 110°C
- **Density:** 1.2 g
- **Molecular Weight:** 90.08 g/mol
- **Solubility:** No data available

**9.2. Other information:**

**Molecular Formula:** C<sub>3</sub> H<sub>6</sub> O<sub>3</sub>

**SECTION 10: STABILITY AND REACTIVITY**

**10.1. Reactivity:-** No data available

**10.2. Chemical stability:** Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions:** No data available

**10.4. Conditions to avoid:** Avoid Moisture

**10.5. Incompatible materials:** Strong oxidising agent

**10.6. Hazardous decomposition products:**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects:****Acute toxicity**

LD50 Oral – Rat – Female – 3.543 mg/kg

LC50 Inhalation - Rat – Male and Female - >7.94 mg/kg – 4h

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

**Material Safety Data Sheet**

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**Skin corrosion/irritation**

Skin – Rabbit

Result: Irritating to skin. - 24 h

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

Buehler Test - Guinea pig

Result: Does not cause skin sensitisation.

**Germ cell mutagenicity**

Hamster

ovary

Cytogenetic analysis

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Additional Information:**

RTECS: OD2800000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



---

**Material Safety Data Sheet**

---

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**SECTION 12: ECOLOGICAL INFORMATION****12.1. Toxicity:****Toxicity to fish**

Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 130 mg/l – 96h

**Toxicity to daphnia and other aquatic invertebrates**

Static test EC50 - Daphnia magna (Water flea) - 130 mg/l - 48 h

(OECD Test Guideline 202)

**Toxicity to algae**

Static test EC50 - Pseudokirchneriella subcapitata (algae) - > 2,8 g/l – 72h

(OECD Test Guideline 201)

**Toxicity to bacteria**

Respiration inhibition EC50 - Sludge Treatment - > 100 mg/l - 3 h

(OECD Test Guideline 209)

**12.2 Persistence and degradability:****Biodegradability**

aerobic - Exposure time 20 d

Result: 67 % Readily biodegradable.

Remarks: The 10 day time window criterion is not fulfilled.

**12.3 Bioaccumulate potential:**

No data available

**12.4 Mobility in soil:**

No data available

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulate and toxic (PBT), or very persistent and very bioaccumulate (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available

**Material Safety Data Sheet**

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

	<b>Land transport (ADR/RID)</b>	<b>Air transport (IATA)</b>	<b>Sea transport (IMDG)</b>
<b>14.1 UN number</b>	—	—	—
<b>14.2 Proper shipping name</b>	Not dangerous goods	Not dangerous goods	Not dangerous goods
<b>14.3 Class</b>	—	—	—
<b>14.4 Packing group</b>	—	—	—
<b>14.5 Environmentally hazardous</b>	No	No	No
<b>14.6 Special precautions for user</b>	—	—	—
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>			
No Data Available			

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**Material Safety Data Sheet**

<b>Product Name</b>	<b><u>L -(+) -Lactic Acid</u></b>
---------------------	-----------------------------------

**SECTION 16: Other information**

**Full text of H-Statements referred to under sections 2 and 3.**

- H315 Causes skin irritation.
- H318 Causes serious eye damage.

**References:** Not available

**Created:** 20/03/2020

**Disclaimer:**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Finar Limited be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Finar Limited has been advised of the possibility of such damages.