

Product Name	L (+)-Tartaric Acid
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:

Product Description: L(+)-Tartaric Acid

Synonyms: Natural tartaric acid; L (+)-Dihydroxysuccinic acid, L-Tartaric acid

CAS-No: 87-69-4

EC-No.: 201-766-0

Molecular Formula: C₄H₆O₆

REACH Registration No: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Recommended Use: For laboratory and manufacturing use only

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-382110, Gujarat, India.
Web: www.finarchemicals.com
- **E-Mail Address** safety.finar@actylis.com; info.finar@actylis.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008

Eye irritation, Category 2, H319

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: **Warning**

Hazard statement(s)

H319 Causes serious eye irritation.

Precautionary statement(s)

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Reduced labelling (≤125 ml)

Pictogram



Signal word: **Warning**

2.3. Other Hazards:

None Known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: L (+)-Tartaric Acid

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3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
L (+)-Tartaric Acid	87-694	201-766-0	>95

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

Fresh air.

• If Contact with skin

Take off immediately all contaminated clothing. Rinse skin with water/ shower.

• In case of eye contact

Rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

• If swallowed

Immediately make victim drink water (two glasses at most). Consult a physician.

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

Irritant effects, Diarrhoea

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

No information available

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

Suitable Extinguishing Media- Use of Water, Foam, dry chemical, or carbon dioxide.

Unsuitable extinguishing media- For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3. Advice for firefighters:

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

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5.4 Further Information:

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

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

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2. Environmental precautions:

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections:

For disposal see Sections 13.

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

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

7.2. Conditions for safe storage, including any incompatibilities:

Storage conditions

Tightly closed. Dry

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:**

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls:

- **Appropriate Engineering Controls:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

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See section 7.1.

Personal Protective Equipment:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye & Face Protection-

Safety goggles

Hand Protection -

Full contact: -

Glove Material: Nitrile Rubber

Glove Thickness: 0.11 mm

Break Through Time: 480 min

Other Protective equipment-

Protective clothing

Respiratory Protection-

Required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. To DIN 3181) for solid and liquid particles of harmful Substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental Exposure Controls-

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

- **Appearance:** White
- **Physical State:** Solid
- **Odor:** Odourless
- **Odor Threshold:** No data available
- **pH:** ca. 1.6 at 100 g/l 25°C
- **Melting Point:** 168 - 170°C / 168 - 172 °C
- **Critical Temperature:** No data available

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- **Vapor Pressure:** < 5 hPa at 20°C
< 5 hPa at 50°C
- **Relative Vapor Density:** No data available
- **Density:** 1.76 g/cm³ at 20°C
- **Auto-Ignition Temperature:** 375°C at 1.015 hPa / 425 °C
- **Decomposition Temperature:** >170°C
- **Volatility:** No data available
- **Bulk Density:** No data available
- **Viscosity:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Lower Explosion Limit:** No data available
- **Upper Explosion Limit:** No data available
- **Boiling Point/Range:** No data available
- **Flash Point:** 210°C
- **Specific Gravity:** 1.76 at 20°C
- **Water Solubility:** 1390 g/l at 20°C

9.2. Other information:

- **Molecular Formula:** C₄H₆O₆
- **Molecular Weight:** 150.09 g/mol

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

Forms explosive mixtures with air on intense heating.

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2. Chemical stability:

The product is chemically stable under standard ambient conditions (room temperature).

10.3. Possibility of hazardous reactions:

Exothermic reaction with: Strong oxidizing agents, silver, hydrogen peroxide alkaline substances with Water

Risk of explosion with: silver salt

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Risk of ignition or formation of inflammable gases or vapours with: Fluorine

10.4. Conditions to avoid:

Strong Heating.

10.5. Incompatible materials:

No data available

10.6. Hazardous decomposition products:

No data available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute Oral toxicity

Symptoms: Diarrhoea

Acute Inhalation toxicity

Symptoms: Possible damages, mucosal irritations

Acute Dermal toxicity

LD50 Rabbit: > 2,000 mg/kg

OECD Test Guideline 402

Skin corrosion/irritation

Rabbit

Result: No skin irritation

OECD Test Guideline 404

Serious eye damage/eye irritation

Eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Local lymph node assay (LLNA) Mouse

Result: negative

Method: OECD Test Guideline 429

Germ cell mutagenicity

Genotoxicity in vivo

dominant lethal test

Rat

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male and female

Oral

Result: negative

Method: OECD Test Guideline 478

Chromosome aberration test

Rat

male

Oral

Result: negative

Method: OECD Test Guideline 475

Genotoxicity in vitro

Ames test

Result: negative

(Lit.)

Carcinogenicity

No data available

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 Further Information:

Substances which occur in nature

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

Toxicity to fish:

Static test LC50 Danio rerio (zebra fish): > 100 mg/l; 96 h

Analytical monitoring: yes

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OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:

EC50 Daphnia (water flea): 135 mg/l; 24 h

(Lit.)

Toxicity to algae:

Static test EC50 activated sludge: > 1,000 mg/l; 3 h

OECD Test Guideline 209

12.2 Persistence and degradability:

Theoretical oxygen demand (ThOD)

533 mg/g

(Lit.)

Ratio BOD/ThBOD

BOD5 56 %

(Lit.)

Ratio COD/ThBOD 98 % (Lit)

12.3 Bioaccumulate potential:

Partition coefficient: n-octanol/water

log Pow: -1.91 (20 °C)

OECD Test Guideline 107

Bioaccumulation is not expected.

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment:

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Other adverse effects:

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport information

	Land transport	Air transport	Sea transport
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	(ADR/RID)	(IATA)	(IMDG)
14.1 UN number	Not classified as dangerous in the meaning of transport regulations.		
14.2 Proper shipping name	Not classified as dangerous in the meaning of transport regulations		
14.3 Class	Not classified as dangerous in the meaning of transport regulations		
14.4 Packing group	Not classified as dangerous in the meaning of transport regulations		
14.5 Environmentally hazardous	Not classified as dangerous in the meaning of transport regulations		
14.6 Special precautions for user	Not classified as dangerous in the meaning of transport regulations		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			
Not Relevant			

SECTION 15: Regulatory information

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

National Legislation

Storage class 10-13

15.2 Chemical safety assessment:

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

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

H319 Causes serious eye irritation.

Training advice

Provide adequate information, instruction and training for operators.

Labelling

Pictogram



Signal word

Warning

Hazard statement(s)

H319 Causes serious eye irritation.

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Precautionary statement(s)

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

References: Not available

Created: 30/07/2021

Updated On: 30/09/2023

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