



L-(-)-Malic Acid Plant Culture Tested
CAS No 97-67-6

MATERIAL SAFETY DATA SHEET
SDS/MSDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : L-(-)-Malic Acid Plant Culture Tested

CAS No. : 97-67-6

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
Ansari Road Daryaganj
New Delhi-110002
INDIA

Telephone : +91 11 49404040

Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2 Hazards Identification

2.1 Classification of the substance or mixture

CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]

Skin corrosion or irritation, (Category 2), H315

Serious eye damage or eye irritation, (Category 2A), H319

Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335

2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008



Pictogram

Signal word Warning

Hazard Statement(s)

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

Precautionary Statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

2.3 Other Hazards

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

SECTION 3 Composition/Information On Ingredients

3.1 Substances

Molecular Formula : C₄H₆O₅
Molecular Weight : 134.09
CAS No. : 97-67-6
EC No. : 202-601-5

| Component | Classification | Concentration |
|---|--|---------------|
| L-(-)-Malic acid Plant Culture Tested | | |
| CAS No. : 97-67-6 EC No. : 202-601-5 | As Per EC Regulation 1272/2008 Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335 | 100% |

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

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 with plenty of soap and water. Consult a physician.

In case of eye contact

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

If swallowed

Do NOT induce vomiting. 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 immediate medical attention and special treatment needed

No data available.

SECTION 5 Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

Carbon oxide, nitrogen oxides (NO_x)

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary

5.4 Further information

No data available

SECTION 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see Section 13.

SECTION 7 Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation 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.

Recommended Storage Temperature : Below 30°C

7.3 Specific end uses

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 to general industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Hygiene measure

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

Eye/face protection

Faceshield and safety goggles.

Skin protection

Handle with gloves.

Body protection

Complete suit protecting against chemicals.

Respiratory protection

Air-purifying respirators.

Environment exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|--|
| Appearance | White to off-white crystals or granules or powder or solid |
| Odour | No data available |
| Odour Threshold | No data available |
| pH | No data available |
| Melting/freezing point | No data available |
| Initial boiling point and boiling range | No data available |
| Flash point | No data available |
| Upper/lower flammability or explosive limits | No data available |
| Evaporation rate | No data available |
| Flammability (Solid, gas) | No data available |
| Vapour pressure | No data available |
| Relative density | No data available |
| Water Solubility | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Autoignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity | No data available |
| Explosive properties | No data available |
| Oxidizing properties | No data available |
| Vapour density | No data available |
| Thermal decomposition | No data available |

9.2 Other safety information

No data available

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

Incompatible material

10.5 Incompatible materials

Strong bases, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products

Other decomposition products - refer section 5.2.

In the event of fire - refer section 5.

SECTION 11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

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

Additional Information

RTECS : Not available

SECTION 12 Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 PBT and vPvB assessment

PBT and vPvB assessment not available Chemical safety assessment is not required

12.6 Other adverse effects

Discharge into the environment must be avoided.

SECTION 13 Disposal Considerations

13.1 Waste treatments methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustive solvent and burn in chemical incinerator equipped with an afterburner and scrubber.

13.2 Contaminated packaging

Dispose of as unused product.

SECTION 14 Transport Information

14.1 UN-No

ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.2 UN proper shipping name

ADNR : Not dangerous goods
ADR : Not dangerous goods
IATA_C : Not dangerous goods
IATA_P : Not dangerous goods
IMDG : Not dangerous goods
RID : Not dangerous goods

14.3 Transport hazard class(es)

ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : -

14.4 Packaging group

ADNR :- ADR :- IATA_C :- IATA_P :- IMDG :- RID :-

14.5 Environmental hazards

ADNR : No ADR : No IMDG : Marine Pollutant : No IATA_C : No IATA_P : No RID : No

14.6 Special precautions for use

No data available

SECTION 15 Regulatory Information

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

15.1 Safety health and environment regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

No data available

SECTION 16 Other information

Text of H-Statements and EUH-Phrases mentioned in section 3

| | |
|---------------|---|
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H335 | May cause respiratory irritation |
| Skin Irrit. 2 | Skin corrosion or irritation, Category 2 |
| Eye Irrit. 2A | Serious eye damage or eye irritation, Category 2A |
| STOT SE 3 | Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3 |

Further Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.