

# Material Safety Data Sheet



**L-ASCORBIC ACID LR**  
(Vitamin C)

**VERSION : 03**  
**DATE OF ISSUE : 31-01-2022**  
**SUPERSEDES : 02**

**Product Code : 12480**

**Page 1 of 7**

## **1. Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

**Trade name** : L-ASCORBIC ACID LR  
**Product code** : 12480  
**Identification of the product** : L-Ascorbic acid  
**CAS No** : 50-81-7

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

**Identified uses** : Laboratory chemicals, Manufacture of substances

### **1.3. Details of the supplier of the safety data sheet**

**Company identification** : MOLYCHEM  
Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor,  
Mumbai – 400 002 (INDIA)  
Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.  
Email : [info@molychem.net](mailto:info@molychem.net)  
Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat  
Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503.

### **1.4. Emergency telephone number**

**Emergency number** : +91 22 4066 8111 (10:00am - 6:00 pm).

## **2. Hazards identification -DSD**

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

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

### **2.2. Label elements**

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

### **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.  
May form explosible dust-air mixture if dispersed.

## **3. Composition/information on ingredients**

### **3.1 Substances**

**Synonyms** : Antiscorbutic factor  
L-Threoascorbic acid  
Vitamin C  
**Formula :** C<sub>6</sub>H<sub>8</sub>O<sub>6</sub>  
**Molecular weight :** 176,12 g/mol  
**CAS-No. :** 50-81-7  
**EC-No. :** 200-066-2  
No components need to be disclosed according to the applicable regulations.

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**Page 2 of 7**

## **4. First aid measures**

### **4.1. Description of first aid measures**

#### **If inhaled**

After inhalation: fresh air.

#### **In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

#### **In case of eye contact**

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### **If swallowed**

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

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

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

No data available

## **5. Fire-fighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Water Foam Carbon dioxide (CO2) Dry powder

#### **Unsuitable extinguishing media**

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

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

Carbon oxides

Combustible.

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

### **5.3. Advice for fire-fighters**

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

### **5.4 Further information**

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

## **6. Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### **6.2. Environmental precautions**

Do not let product enter drains.

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**Page 3 of 7**

## 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 section 13.

## 7. Handling and storage

### 7.1. Precautions for safe handling

For precautions see section 2.2.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage conditions

Tightly closed. Dry.

Light sensitive.

### 7.3. Specific end use(s)

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

## 8. Exposure controls/personal protection

### 8.1. Exposure controls

**Personal protection :** Avoid all unnecessary exposure.

- **Respiratory protection :** Wear approved mask.
- **Hand protection :** Wear protective gloves.
- **Eye protection :** Chemical goggles or safety glasses.
- **Others :** When using, do not eat, drink or smoke.

### 8.2. Control parameters

**Occupational Exposure Limits :** No data available.

## 9. Physical and chemical properties

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

- |  |  |
|--|--|
| a) Appearance                              | Form: solid                                      |
| b) Odor                                    | No data available                                |
| c) Odor Threshold                          | No data available                                |
| d) pH                                      | No data available                                |
| e) Melting point/freezing point            | Melting point/range: 190 - 194 °C                |
| f) Initial boiling point and boiling range | No data available                                |
| g) Flash point                             | No data available                                |
| h) Evaporation rate                        | No data available                                |
| i) Flammability                            | May form combustible dust concentrations in air. |

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**Page 4 of 7**

(solid, gas)

j) Upper/lower flammability or explosive limits No data available

k) Vapor pressure No data available

l) Vapor density No data available

m) Density 1,65 g/cm<sup>3</sup> at 20 °C

Relative density No data available

n) Water solubility No data available

o) Partition coefficient: No data available  
n-octanol/water

p) Autoignition temperature No data available

q) Decomposition temperature No data available

r) Viscosity Viscosity, kinematic: No data available  
Viscosity, dynamic: No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

## 9.2. Other information

No data available

## 10. Stability and reactivity

### 10.1. Reactivity

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

Violent reactions possible with:

Aluminum

Copper alloys

Zinc

metal ions

Oxidizing agents

Copper

Acids

bases

### 10.4. Conditions to avoid

Light.

no information available

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**Page 5 of 7**

## 10.5. Incompatible materials

no information available

## 10.6. Hazardous decomposition products

In the event of fire: see section 5.

## 11. Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
	pH: 1 - 2.5
Serious eye damage/irritation	: Not classified
	pH: 1 - 2.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

## 12. Ecological information

### 12.1. Toxicity

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - 1.020 mg/l - 96 h (OECD Test Guideline 203) Remarks: acidic
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 360 mg/l - 48 h Remarks: (External MSDS)
Toxicity to algae	IC50 - Desmodesmus subspicatus (green algae) - 1.750 mg/l - 72 h Remarks: (External MSDS)
Toxicity to bacteria	EC50 - Pseudomonas putida - 140 mg/l - 16 h Remarks: (External MSDS)

### 12.2. Persistence - degradability

Biodegradability	Result: 97 % - Readily eliminated from water (OECD Test Guideline 302B)
Ratio BOD/ThBOD	65 % Remarks: Closed Bottle test(own results)
Ratio BOD/ThBOD	48 % Remarks: Closed Bottle test(own results)

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**Page 6 of 7**

## **12.3. Bioaccumulative 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, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **12.6. Other adverse effects**

Discharge into the environment must be avoided.

## **13. Disposal considerations**

### **13.1. Waste treatment methods**

No additional information available

## **14. Transport information**

### **14.1. UN number**

ADR/RID: -

IMDG: -

IATA: -

### **14.2. UN proper shipping name**

ADR/RID:

Not dangerous goods

IMDG:

Not dangerous goods

IATA:

Not dangerous goods

### **14.3. Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

### **14.4 Packaging group**

ADR/RID: -

IMDG: -

IATA: -

### **14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### **14.6 Special precautions for user**

#### **Further information**

Not classified as dangerous in the meaning of transport regulations.

## **15. Regulatory information**

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

This material safety data sheet 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

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**Page 7 of 7**

## **16. Other information**

**Abbreviations and acronyms :** PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

**Sources of key data used :** REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

**Further information :** None.

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## **End of document**

**Prepared by: MOLYCHEM (INDIA)**

**For questions contact: MOLYCHEM**

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