

Version 1.0

L-Lactide: (3S,6S)-(-)-3,6-Dimethyl-1,4-dioxane-2,5-dione

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

1. Product Identifiers

Product name : L-Lactide
CAS No : 4511-42-6
Synonyms : (3S,6S)-(-)-3,6-Dimethyl-1,4-dioxane-2,5-dione

2. Recommended Use

Laboratory chemicals, Manufacture of substances

3. Uses advised against

Food, drug, pesticide or biocidal product use.

4. Details of the supplier of the safety data sheet

Company : Nomisma Healthcare Private Limited
J-63, B.I.D.C Estate, Opp. Jyoti Switch Gear Pvt. Ltd.,
Gorwa, Vadodara, Gujarat - 390 0016, India
Phone : (+91) 97731 34699
Email : info@nomismahealthcare.com

5. Emergency telephone number

Emergency phone : (+91) 97731 34699,
(+91) 97731 34279

SECTION 2: Hazards identification

1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Corrosion/Irritation	Category 2, H319
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

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

2. Label Elements

a. Signal Word

Warning

b. Hazard Statement(s)

Causes skin irritation

Causes serious eye irritation (H319)

May cause respiratory irritation

c. Pictogram



3. Precautionary Statements

a. Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves / protective clothing / eye protection / face protection
Avoid breathing dust / fume / gas / mist / vapors / spray
Use only outdoors or in a well-ventilated area

b. Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor / physician if you feel unwell

c. Skin

IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

d. Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice / attention

e. Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

f. Disposal

Dispose of contents/container to an approved waste disposal plant

4. 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

1. Substances

Synonyms	: L-Lactide
Formula	: C ₆ H ₈ O ₄
Molecular weight	: 144,13 g/mol
CAS-No.	: 4511-42-6
EC-No.	: 224-832-0

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Component	Classification	Concentration
L-Lactide		
CAS-No. 4511-42-6	Eye Irrit. 2; H319	<= 100 %
EC-No. 224-832-0		

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

SECTION 4: First aid measures**1. Description of first-aid measures****General advice**

Show this material safety data sheet to the doctor in attendance.

If inhaled

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

In case of skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Fire-fighting measures**1. Extinguishing media****Unsuitable extinguishing media**

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

2. Special hazards arising from the substance or mixture

Carbon oxides

3. Advice for firefighters

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

4. Further information

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

SECTION 6: Accidental release measures

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, and consult an expert.

For personal protection see section 8.

2. Environmental precautions

Do not let product enter drains.

3. Methods and materials 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.

4. Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

1. Precautions for safe handling

For precautions see section 2.2.

2. Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage stability

Recommended storage temperature 2 - 8 °C

Handle and store under inert gas. Hydrolyzes readily.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

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

1. Control parameters

Ingredients with workplace control parameters

2. Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

3. Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

4. Personal Protective Equipment

Appropriate technical controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and after working day.

Personal Protection
Protection of eyes / face

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

Skin protection

Handle with gloves.

Body Protection

Full protective clothing against chemicals the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific place of work.

Respiratory protection

Required when dusts are generated

No protective equipment is needed under normal use conditions

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

SECTION 9: Physical and chemical properties
1. Information on basic physical and chemical properties

Physical State	: Crystalline
Appearance	: White
Odor	: No information available
Odor threshold	: No information available
pH	: No information available
Melting point/Range	: 90 - 97 °C
Initial boiling point / Range	: 266 °C at 1.019 hPa - lit.
Flash point	: No information available
Evaporation rate	: Not applicable
Flammability (solid, gas)	: No information available
Upper / lower flammability or explosive limits	: No data available
Vapor pressure	: No information available
Vapor density	: Not applicable
Specific Gravity	: No information available
Solubility	: No information available

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Partition coefficient; n-octanol/water	: No data available
Autoignition temperature	: Not applicable
Decomposition temperature	: No information available
Viscosity	: Not applicable
Molecular Formula	: C ₆ H ₈ O ₄
Molecular Weight	: 144.13

2. Other information

No data available

SECTION 10: Stability and Reactivity
1. Reactivity Hazard

None known, based on information available

2. Chemical Stability

Decomposes in contact with water. Moisture sensitive, the product is chemically stable under standard ambient conditions (room temperature)

3. Conditions to avoid

No information available

4. Possibility of hazardous reactions

No data available

5. Incompatible materials

Acids, Bases, Strong oxidizing agents

6. Hazardous decomposition products

In the event of fire: see section 5

7. Hazardous Polymerization

Hazardous polymerization does not occur

8. Hazardous Reactions

None under normal processing

SECTION 11: Toxicological information
1. Information on toxicological effects
Acute Toxicity

LD50 Oral - Rat - male and female - > 2.000 mg/kg

(OECD Test Guideline 423)

Inhalation: No data available

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

(OECD Test Guideline 402)

Skin corrosion/irritation

No data available

Material Safety Data Sheet**Revision Date: 06-01-2023****Serious eye damage/eye irritation**

No data available

Respiratory or skin sensitization

In vivo assay – Mouse

Result: Does not cause skin sensitization.

(OECD Test Guideline 429)

Germ cell mutagenicity

No data available

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

2. Additional Information

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

SECTION 12: Ecological information**1. Toxicity**

No data available

2. Persistence and degradability

No data available

3. Bioaccumulative potential

No data available

4. Mobility in soil

No data available

5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

6. Endocrine disrupting properties

No data available

7. Other adverse effects

No data available

SECTION 13: Disposal considerations

1. Waste treatment methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport Information

1. UN number

ADR/RID: -

IMDG: -

IATA: -

2. UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

ATA: Not dangerous goods

3. Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

4. Packaging group

ADR/RID: -

IMDG: -

IATA: -

5. Environmental hazards

ADR/RID: - No

IMDG Marine pollutant: - No

IATA: - No

6. Special precautions for user

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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.

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

2. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Material Safety Data Sheet**Revision Date: 06-01-2023****SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

H319 Causes serious eye irritation.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Material Safety Data Sheet

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