

According to Regulation (EC) No 1907/2006

L-Ornithine-L-aspartate



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

1.1. Product identifier

Trade name

L-Ornithine-L-aspartate

CAS number

3230-94-2

EC number

221-772-7

Synonyms

(2S)-2,5-diaminopentanoic acid; (2S)-2-aminobutanedioic acid

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

Relevant identified uses

Research and development.

Not suitable for use in

Not suitable for human consumption or veterinary purposes.

1.3. Details of the supplier of the safety data sheet

Supplier

Molekula Group

Street address

Molekula Ltd, Lingfield Way, Darlington,

DL1 4XX Darlington

United Kingdom

Telephone

+44 (0) 3302 000 333

Email

info@molekula.com

Web site

www.molekula.com

Contact person

Kevin Banks

Email address

+44 (0) 7769276927

1.4. Emergency telephone number

Poison center/Additional emergency number

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous according to Regulation (EC) No 1272/2008.

2.2. Label elements

The product does not require labelling in accordance with CLP Regulation (EC) No 1272/2008.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Chemical name | CAS No. EC No. REACH No. Index No. | Concentration | Classification | H-phrase M factor acute M factor chronic | Note |
|-------------------------|---|---------------|----------------|--|------|
| L-Ornithine-L-aspartate | 3230-94-2 221-772-7 - - | 100% | - | - - - | - |

Molecular weight

265.26

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move to fresh air if inhaled.

Get medical attention if any discomfort continues.

Skin contact

Rinse skin with water.

If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

Remove contact lenses if present. Rinse eyes with water.

If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth.

Get medical advice/attention if you feel unwell.

Information for doctors

No data available.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

May cause respiratory irritation.

Skin contact

Prolonged contact may cause dryness of the skin.

Eye contact

May be slightly irritating to the eyes.

Ingestion

May cause discomfort if swallowed.

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

Treat symptomatically. No special treatment requirement.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

Unsuitable extinguishing media

No specific fire fighting procedure given.

5.2. Special hazards arising from the substance or mixture

Specific hazards: None.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Avoid dust formation. Avoid breathing dust/fume/gas/mist/vapours/spray. For personal protection, see section 8.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

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6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Avoid formation of dust and aerosols. Provide adequate ventilation. For precautions see section 2.2.

General hygiene

Observe good chemical hygiene practices. Wash skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry place. Store in a closed container. Recommended storage temperature: 2 to 8°C (35.6 to 46.4°F)

7.3. Specific end use(s)

No specific usage precautions noted.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

No occupational exposure limit assigned.

8.2. Exposure controls

Eye / face protection

Wear eye protection.

Hand protection

Wear protective gloves.

Recommended gloves: Nitrile.

Glove Thickness: 0.11mm

Breakthrough time: 480 minutes

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Wash contaminated skin thoroughly after handling.

Other skin protection

Wash skin thoroughly after handling.

Respiratory protection

Provide adequate ventilation.

Environmental exposure controls

Avoid discharge into drains.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Solid

Colour

White / off-white.

Odour

No data available

Melting point / freezing point

198-204°C

Boiling point or initial boiling point and boiling range

No data available

Flammability

No data available

Lower and upper explosion limit

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

pH

No data available

Kinematic viscosity

No data available

Solubility

Soluble in water.

Partition coefficient n-octanol/water

No data available

Vapour pressure

No data available

Density and/or relative density

No data available

Relative vapour density

No data available

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Particle characteristics

No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

There are no known conditions that are likely to result in a hazardous situation.

10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

See section 5.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

| Product / Substance name CAS / EC no. | Dose descriptor | Value / Dose | Exposure route | Test animals |
|--|-----------------|--------------|----------------|--------------|
| L-Ornithine-L-aspartate 3230-94-2 / 221-772-7 | LD50 | 5000 mg/kg | Oral | Mouse |

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

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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. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

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

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

EU regulations

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

National regulations

No data available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

No data available