



SAFETY DATA SHEET

L-ASPARTIC ACID

Page: 1

Compilation date: 22/06/2015

Revision No: 1

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

1.1. Product identifier

Product name: L-ASPARTIC ACID

CAS number: 56-84-8

EINECS number: 200-291-6

Product code: GPC4182

Synonyms: (S)-(+)-AMINOSUCCINIC ACID

(S)-AMINOBTANEDIOIC ACID

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

Use of substance / mixture: Manufacture of substances. Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Atom Scientific Ltd

Unit 2B East Tame Business Park

Rexcine Way

Hyde

Cheshire

SK14 4GX

United Kingdom

Tel: +44 161 366 5123

Fax: +44 170 433 7167

Email: technical@atomscientific.com

1.4. Emergency telephone number

Emergency tel: +44 161 366 5123

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

2.2. Label elements

Label elements: This product has no label elements.

2.3. Other hazards

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.

[cont...]

SAFETY DATA SHEET

L-ASPARTIC ACID

Page: 2

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: L-ASPARTIC ACID

CAS number: 56-84-8

EINECS number: 200-291-6

Contains: Molecular Formula: C₄H₇NO₄

Molecular Weight: 133.10 g/mol.

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues. Consult a doctor.

Eye contact: 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. Consult a doctor.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

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

Skin contact: May be harmful if absorbed through the skin. There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely. The vision may become blurred.

Ingestion: May be harmful if swallowed. There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. There may be vomiting. Nausea and stomach pain may occur.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing. May cause drowsiness and dizziness.

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

Immediate / special treatment: Show this safety data sheet to the doctor in attendance. Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

[cont...]

SAFETY DATA SHEET

L-ASPARTIC ACID

Page: 3

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Carbon oxides. Nitrogen Oxides (NO_x)

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Use water spray to cool unopened containers.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust. Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

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

Handling requirements: Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Non Combustible Solids

7.3. Specific end use(s)

Specific end use(s): No other specific uses stipulated other than the uses mentioned in section 1.2.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after breaks and at the end of workday.

[cont...]

SAFETY DATA SHEET

L-ASPARTIC ACID

Page: 4

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with application laws and good laboratory practises. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Full contact - Material: Nitrile rubber. Minimum layer thickness: 0.11 mm. Break through time: 8 hrs. Splash contact - Material: Nitrile rubber. Minimum layer thickness: 0.11 mm. Break through time: 8hrs. If used in solution, or mixed with substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.

Eye protection: Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Powder

Colour: White

Solubility in water: Soluble

Melting point/range °C: > 300

Relative density: 1.66

pH: 2.8 @ 1.5g/l @ 20C

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under recommended storage conditions.

[cont...]

SAFETY DATA SHEET

L-ASPARTIC ACID

Page: 5

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: No data available.

10.5. Incompatible materials

Materials to avoid: Strong acids. Strong bases. Strong oxidising agents. Nitric acid.

10.6. Hazardous decomposition products

Haz. decomp. products: In the event of fire: see section 5 Other decomposition products - no data available.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	5,000	mg/kg
DERMAL	RABBIT	LD50	5,000	mg/kg

Symptoms / routes of exposure

Skin contact: May be harmful if absorbed through the skin. There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely. The vision may become blurred.

Ingestion: May be harmful if swallowed. There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. There may be vomiting. Nausea and stomach pain may occur.

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing. May cause drowsiness and dizziness.

Other information: RTECS: CI9098500. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

[cont...]

SAFETY DATA SHEET

L-ASPARTIC ACID

Page: 6

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

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

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

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

15.2. Chemical Safety Assessment

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

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.