

# **MATERIAL SAFETY DATA SHEET**

www.britiscientific.com Issue Date:

# 1- Chemical Product Information and Company Identification.

**Product Name:** : D-(+)-Lysine reference standard, Anstan<sup>®</sup>.

**Synonym:** : (S)-2,6-Diaminocaproic acid.

Product code: : BS13969.

CAS Number: : 923-27-3.

Company Name: : Briti Scientific.

Company Address: : Plot No:78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad-500 055.

Telangana, India.

# **Section 2- Composition / Information on Ingredients.**

CAS No. Chemical Name Mol. Formula 923-27-3. (S)-2,6-Diaminocaproic acid;  $C_6H_{14}N_2O_2$ .

## **Section 3- Hazards Identification.**

#### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### **Label Elements**

None required.

### **Hazards not otherwise classified (HNOC)**

None identified.

### **Section 4- First Aid Measures.**

**Eye Contact**: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

**Skin Contact**: Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

**Inhalation**: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion: Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects: No information available.

Notes to Physician: Treat symptomatically.











# **Section 5- Fire Fighting Measures.**

Suitable Extinguishing Media: Water spray, carbon dioxide (CO2), dry chemical,

alcohol-resistant foam.

Unsuitable Extinguishing Media: No information available.
 Flash Point: No information available.
 Method - No information available.
 Autoignition Temperature: No information available.

**Explosion Limits** 

Upper No data available Lower No data available

**Sensitivity to Mechanical Impact:** No information available. **Sensitivity to Static Discharge:** No information available.

**Specific Hazards Arising from the Chemical** 

Keep product and empty container away from heat and sources of ignition. **Hazardous Combustion Products:** Carbon monoxide (CO<sub>2</sub>). Carbon dioxide (CO<sub>2</sub>).

**Protective Equipment and Precautions for Firefighters** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

Health Flammability Instability Physical hazards
1 1 0 N/A

### Section 6- Accidental Release Measures.

**Personal Precautions**: Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions:** Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up:

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

# **Section 7- Handling and Storage.**

**Handling**: Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents.











# **Section 8- Exposure Control/Personal Protection.**

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

**Engineering Measures**: None under normal use conditions.

**Personal Protective Equipment** 

**Eye/face Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or EuropeanStandardEN166.

**Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection: 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.**

Appearance: White to Pale Beige Solid.

Odor: No information available.

Odor Threshold: No information available.

pH: No information available.

Melting Point/Range: 218°C.

Boiling Point/Range:No information available.Flash Point:No information available.Evaporation Rate:No information available.

Flammability (solid,gas): Not applicable.

Flammability or explosive limits:

Upper No information available.
Lower No information available.

Vapor Pressure: No information available.

**Density:** 1.125 g/cm<sup>3</sup>. **Soluble in water.** 

Partition coefficient; n-octanol/water: No data available.

Autoignition Temperature: No data available.

Decomposition Temperature: No data available.

Viscosity: No data available.

 $\label{eq:molecular formula:} \begin{tabular}{ll} $C_6H_{14}N_2O_2$. \\ \begin{tabular}{ll} $Molecular Weight$ & 146.19 g/mol. \\ \end{tabular}$ 











# Section 10- Stability and Reactivity.

Reactive Hazard: None known, based on information available.

Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible products. Keep away from open flames, hot surfaces and sources

of ignition.

**Incompatible Materials**: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

Hazardous Polymerization: Hazardous polymerization does not occur.

Hazardous Reactions: None under normal processing.

## **Section 11- Toxicological Information.**

**Acute Toxicity** 

Product Information: No acute toxicity information is available for this product.

**Component Information** 

Toxicologically Synergistic Products: No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation:** May cause skin, eye, and respiratory tract irritation.

Sensitization: No information available.

Mutagenic Effects: No information available.

Reproductive Effects: No information available.

Developmental Effects: No information available.

Teratogenicity: No information available.

STOT - single exposure None known STOT - repeated exposure None known **Aspiration hazard:** No information available.

Symptoms / effects, both acute and delayed: No information available.

**Endocrine Disruptor Information:** No information available.

Other Adverse Effects: The toxicological properties have not been fully investigated.

## **Section 12- Ecological Information.**

**Ecotoxicity:**Persistence and Degradability:
Bioaccumulation/ Accumulation:
No information available.
Mobility:
No information available.
No information available.











# **Section 13- Disposal Considerations.**

**Waste Disposal 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.**

DOT: Not regulatedTDG: Not regulatedIATA: Not regulatedIMDG/IMO: Not regulated

# **Section 15- Regulatory Information.**

#### Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710).

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export: Not applicable.

**U.S. Federal Regulations** 

SARA 313: Not applicable

SARA 311/312 Hazard Categories See section 2 for more information.

CWA (Clean Water Act): Not applicable

Clean Air Act: Not applicable
OSHA - Occupational Safety and

Health Administration: Not applicable

**CERCLA:** Not applicable

California Proposition 65: This product does not contain any Proposition 65 chemicals.

### Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.







