GREEN VALLEY LABORATORY

Safety Data Sheet

According to Regulation (EC) No 1272/2008 (CLP) and the OSHA Hazard Communication Standard, 29 CFR 1910.1200

SECTION 1 - Identification

1.1 Product identifier

GHS Product Identifier	Proline (Amino Acid)
Chemical Name	L-Proline
Synonyms	(S)-Pyrrolidine-2-carboxylic acid
CAS No.	147-85-3
EC No.	205-702-2
Molecular Formula	C5H9NO2
Molecular Weight	115.13 g/mol

1.2 Relevant identified uses of the substance and uses advised against

Identified use	Cosmetic raw material. For manufacturing and professional formulation use only.
Uses advised against	Any use other than the identified use above.

1.3 Details of the supplier of the Safety Data Sheet

Supplier Name	Green Valley Laboratory
Address	435 Hartford Pike, Killingly, CT 06241, USA
Contact	Help@dauphineorganics.com
Phone	n/a

1.4 Emergency telephone number

Emergency Phone No.	CHEMTREC Emergency Call Center +1 800-424-9300 (US & Canada) - +1 703-527-3887 (Europe)

SECTION 2 - Hazard Identification

2.1 Classification of the substance

Not classified as hazardous according to Regulation (EC) No 1272/2008 (CLP) or the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

No harmonised classification is listed for this substance in Annex VI to Regulation (EC) No 1272/2008. In the ECHA Classification and Labelling Inventory, 419 of 423 notifiers report that the substance does not meet GHS hazard criteria.

2.2 Label elements

Hazard Pictogram	None required
Signal Word	None
Hazard Statements	None
Precautionary Statements	None

2.3 Other hazards

No other hazards identified. Avoid the formation and inhalation of dust during handling.

SECTION 3 - Composition / Information on Ingredients

3.1 Substance

Ingredient	%W/W	CAS No.	EC No.
L-Proline	98.5 - 101.0 (assay, on dried basis)	147-85-3	205-702-2

Single-substance material. No hazardous impurities are declared in the published specification.

SECTION 4 - First Aid Measures

4.1 Description of first aid measures

General	No specific measures required. When in doubt, or if symptoms persist, seek medical advice.
Inhalation	Move the affected person to fresh air. Seek medical attention if symptoms occur.
Skin contact	Wash the affected skin with soap and water.
Eye contact	Rinse with plenty of water, holding the eyelids apart. Seek medical attention if irritation persists.
Ingestion	Rinse the mouth with water. Seek medical attention if symptoms occur.

4.2 Most important symptoms and effects

No symptoms or effects are expected on the basis of the classification given in Section 2. Dust may cause mechanical irritation of the eyes and respiratory tract.

4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically. No specific antidote is known.

SECTION 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray, foam, dry chemical powder, carbon dioxide.
Unsuitable extinguishing media	None known.

5.2 Special hazards arising from the substance

On heating to decomposition the substance emits oxides of nitrogen. Oxides of carbon may also be formed during combustion.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing when fighting a fire involving this material.

SECTION 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid the formation of dust. Wear the personal protective equipment described in Section 8.

6.2 Environmental precautions

Prevent entry into drains and watercourses.

6.3 Methods and material for containment and cleaning up

Sweep or vacuum up the spilled solid, avoiding dust generation, and transfer to a suitable, clearly marked container for disposal. Rinse the area with water.

SECTION 7 - Handling and Storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene practice. Avoid the formation and inhalation of dust. Wash hands after handling.

7.2 Conditions for safe storage

Store in the tightly closed original container in a dry place at room temperature, protected from moisture.

7.3 Specific end uses

Cosmetic raw material for professional formulation use.

SECTION 8 - Exposure Controls / Personal Protection

8.1 Control parameters

No occupational exposure limit values have been established for this substance.

8.2 Exposure controls

Engineering controls	Provide adequate general ventilation. Use local exhaust ventilation where dust is generated.
Eye / face protection	Safety glasses with side shields.
Skin protection	Protective gloves and suitable working clothing.
Respiratory protection	Not normally required. Use a dust mask where dust is generated.

SECTION 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	White crystals or crystalline powder
Odour	Odourless
Melting point	220 - 222 °C (with decomposition)
Density	1.064 at 24 °C
Solubility in water	1500 g/L; 162 g per 100 mL at 25 °C
Solubility in other solvents	Alcohol 1.55 % at 35 °C; insoluble in ether, butanol and isopropanol
Dissociation constants	pK1 1.99 (carboxyl); pK2 10.60 (amine)
Specific rotation	α 25 °C/D (4 % in water): –84.3° to –86.3°
Flash point	No data available
Vapour pressure	No data available
Explosive properties	No data available
Oxidising properties	No data available

SECTION 10 - Stability and Reactivity

10.1 Reactivity	No hazardous reactions are known under normal conditions of use.
10.2 Chemical stability	Stable under the recommended storage conditions given in Section 7.
10.3 Possibility of hazardous reactions	None known under normal processing conditions.
10.4 Conditions to avoid	Heat, moisture and dust formation.
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	On heating to decomposition: oxides of nitrogen; oxides of carbon.

SECTION 11 - Toxicological Information

11.1 Information on toxicological effects

Acute toxicity, oral	LD50 (rat): > 5110 mg/kg body weight (ECHA registered substance data)
Acute toxicity, dermal	No data available

Acute toxicity, inhalation	No data available
Skin corrosion / irritation	Not classified
Serious eye damage / irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT - single and repeated exposure	Not classified
Aspiration hazard	Not classified

"Not classified" indicates that the substance does not meet the classification criteria of Regulation (EC) No 1272/2008 for that endpoint. Dust may cause mechanical irritation of the eyes and respiratory tract.

SECTION 12 - Ecological Information

12.1 Toxicity	Not classified as hazardous to the aquatic environment under Regulation (EC) No 1272/2008.
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 Other adverse effects	None known

SECTION 13 - Disposal Considerations

13.1 Waste treatment methods

Dispose of the product and its container in accordance with applicable local, regional and national regulations. Do not discharge into drains or watercourses.

SECTION 14 - Transport Information

14.1 UN number	Not assigned
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	None

Not classified as a dangerous good for transport under the UN Model Regulations, the IMDG Code, the IATA Dangerous Goods Regulations or 49 CFR, on the basis of the classification given in Section 2.

SECTION 15 - Regulatory Information

Regulation (EC) No 1272/2008 (CLP): no harmonised classification is listed in Annex VI for this substance.

The substance is listed in the ECHA Classification and Labelling Inventory under EC No. 205-702-2.

The user is responsible for compliance with all applicable federal, state and local regulations governing the use of this material.

SECTION 16 - Other Information

References and data sources

Regulation (EC) No 1272/2008 (CLP), including Annex VI harmonised classification list
ECHA Classification and Labelling Inventory, EC No. 205-702-2 (CAS 147-85-3)
ECHA registered substance data for acute oral toxicity, CAS 147-85-3
PubChem Compound Summary, CID 145742 (L-Proline), US National Library of Medicine - experimental physical properties and GHS classification data
Published pharmacopoeial-grade specification for L-Proline (Ph. Eur. / USP), CAS 147-85-3

OSHA Hazard Communication Standard, 29 CFR 1910.1200

Abbreviations

CLP: Classification, Labelling and Packaging. ECHA: European Chemicals Agency. GHS: Globally Harmonised System. LD50: median lethal dose. PBT: persistent, bioaccumulative and toxic. STOT: specific target organ toxicity. vPvB: very persistent and very bioaccumulative.

Document status

This Safety Data Sheet was compiled from published regulatory and public database sources for the substance identified in Section 1. It is not based on testing of an individual production lot.

DISCLAIMER

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.

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