1. Chemical Product and Company Identification

1.1. Identification of the substance: L-Proline

1.2. Use of the substance: Various use (drugs, nutritional, industrial)

1.3. Company identification:

Manufacturer's Name: Ajinomoto Health & Nutrition North America Inc.

1.4 Contact for Correspondence Japan:

Ajinomoto Co., Ltd.
15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, Japan
Tel N°: +81-(0)3-5250-8111
Fax N°: +81-(0)3-5250-0079

Contact for Correspondence Brazil:

Ajinomoto do Brasil Indústria e Comércio de Alimentos Ltda.
Rua Vergueiro, 1737, Vila Mariana, 04101-001-São Paulo- SP, Brazil
Tel N°: +55 11 5080-6700
Fax N°: +55 11 5080-6789

Contact for Correspondence China:

Ajinomoto (China) Co., Ltd.
718 Rongle Dong Road, Songjiang, Shanghai 201613 P.R. China
Tel N°:+86 21 5774-5353
Fax N°: +86 21 5774-0433

Contact for Correspondence USA

Ajinomoto Health & Nutrition North America Inc.
4020 Ajinomoto Drive, Raleigh N.C. 27610, U.S.A
Tel N°: +919-325-1400
Fax N°: +919-325-1420

Contact for Correspondence Europe:

S.A. Ajinomoto Omnichem N.V.
I Axis Park, Rue Emile Francqui 7
1435 Mont-Saint-Guibert, Belgium
Tel N°: +32(0)10 48 31 22
Fax N°: +32(0)10 45 62 27

Contact for Correspondence Asia, Oceania

Shanghai Ajinomoto Trading Co., Ltd.
718 Rongle Dong Road, Songjiang, Shanghai 201613 P.R. China
Tel N°: +86 21 5774-5353
Fax N°: +86 21 5774-0433

1.5. Emergency Telephone:

In continental U.S., Hawaii, Puerto Rico, Canada, Alaska and Virgin Islands contact CHEMTREC at 1-800-424-9300.

For Japan, Brazil, Europe, China and Asia refer to section 1.4

2. Hazards Identification

2.1 Classification of the substance

Physical hazards: Not applicable
Health hazards: Not applicable
Environmental hazards: Not applicable

2.2 Label elements (REGULATION (EC) No.1272/2008)

Not applicable

2.3 Other hazards:

May cause eye and skin irritation.
It will increase the biological oxygen demand (BOD) of water.

3. Composition, Information on Ingredients

3.1. Substance

Common Chemical name: L-Proline
Synonyms: (S)-2-Pyrrolidinecarboxylic acid
Formula: C₅H₉NO₂
Molecular Weight: 115.13
Composition: 98.5 - 101.0%
CAS No.: 147-85-3
EINECS No.: 205-702-2
IUPAC: L-Pro
4. First-Aid Measures
4.1 Description of first aid measures
Inhalation: Immediately relocate to a fresh air environment. Rinse mouth with water. If not breathing, give artificial respiration. If breathing becomes difficult, give oxygen and seek medical attention.
Skin Contact: Wash with soap and copious amounts of water. If irritation persists, seek medical attention.
Eye Contact: Immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. If contact lenses are being worn, remove lenses and continue rinsing. Seek medical attention.
Ingestion: Rinse mouth with water and seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed
No information available

5. Fire-fighting measures
5.1 Extinguishing media
Water spray, carbon dioxide, dry chemical powder/foam

5.2 Special hazards arising from the substance or mixture
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Upon combustion will result in carbon monoxide, carbon dioxide and nitrogen oxide being released.

5.3 Advice for fire-fighting
No information available

6. Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures.
Use personal protection, Make spills wet to prevent the generation of dust and then, sweep up into a closed container.
6.2 Environmental precautions
Do not discharge into sewer, river, underground water, etc.

6.3 Methods and material for containment and cleaning up
After recovering, wash away spilled area with plenty of water.

6.4 Reference to other sections
Personal protection: see section 8

7. Handling and storage
7.1. Precautions for safe handling
Follow good industrial practice in housekeeping and personal hygiene. Wear personal protective equipment as outlined in section 8.

7.2. Conditions for safe storage, including any incompatibilities
Store in closed containers in a dry area. Avoid humidity, sunlight and high temperature.

8. Exposure controls/personal protection
8.1 Control parameters
Contains no substance with occupational exposure limit value

8.2 Exposure controls
Respiratory protection: Dust mask or appropriate respirator. Utilize local exhaust ventilation.
Protective gloves: Rubber
Eye protection: Chemical safety goggles.
Other protective equipment: Wear appropriate laboratory apparel, protect exposed skin.
Occupational exposure limits: Not established
9. Physical and chemical properties
   9.1 Information on basic physical and chemical properties
   Appearance: White crystals or crystalline powder
   Melting point: 220-222°C (decomposes)
   Solubility: 155 g/100g H₂O (20°C)
   pH: 5.9-6.9 (1.0g in 10mL of H₂O)

9.2 Other data
   No data available

10. Stability and reactivity
    10.1 Reactivity
        The following applies in general to flammable organic substances and mixtures; in correspondingly fine
        distribution, when whirled up a dust explosion potential may generally be assumed.
    10.2 Chemical stability
        Stable under normal temperature and pressures
    10.3 Possibility of hazardous reactions
        Nitrogen oxides (combustion)
    10.4 Conditions to avoid
        Humidity and high temperature. In presence of moisture, will oxidize and darken.
    10.5 Incompatibility materials
        Strong oxidizing agents
    10.6 Hazardous decomposition products:
        Nitrogen oxides (combustion)

11. Toxicological information
    11.1 Information on toxicological effects
        Acute oral toxicity: LD₅₀ > 16 g/kg rat
        Sensitization: No data available
        Mutagenicity: No data available
        Primary skin irritation: May cause skin irritation. No specific data available
        Primary eye irritation: May cause eye irritation. No specific data available

12. Ecological information
    12.1 Toxicity
        No data available
    12.2 Persistence and degradability
        BOD₅ = 1.205 g/g
    12.3 Bio accumulative potential
        No data available
    12.4 Mobility in soil
        No data available
    12.5 Results of PBT and vPvB assessment
        PBT and vPvB assessment not available as chemical safety assessment not required/not conducted.
    12.6 Other adverse effects
        WGK class (Europe):1 (group classification according to VwVwS / 17 May 1999, Germany)

13. Disposal considerations
    Dispose of the material as you would with a non-hazardous material in accordance with all applicable national,
    state and local regulations.

14. Transport information
    Avoid humidity and high temperature. Prevent damage of the container.
    14.1-14.6 Not classified as dangerous in meaning of transport regulations.
    14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC code
15. Regulatory information

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

EU regulations

<table>
<thead>
<tr>
<th>Major Accident Hazard</th>
<th>96/82/EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation</td>
<td>Directive 96/82/EC does not apply</td>
</tr>
<tr>
<td>Regulation(EC) No.1005/2009 on substances that deplete</td>
<td>not regulated</td>
</tr>
<tr>
<td>the ozone layer</td>
<td></td>
</tr>
<tr>
<td>Regulation (EC) No689/2008 concerning the export and</td>
<td>not regulated</td>
</tr>
<tr>
<td>import of dangerous chemicals.</td>
<td></td>
</tr>
<tr>
<td>Substance of very high concern(SVHC)</td>
<td>This product does not contain substance of very high concern above the respective regulatory limit (&gt; 0.1% (w/w) Regulation (EC) No.1907/2006(REACH), Article 57).</td>
</tr>
</tbody>
</table>

Other National Legislation

None especially.

The information given in this Safety Data Sheet does not replace the user’s own assessment of workplace risk as required by national, state and local health and safety legislation.

15.2 Chemical safety assessment

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

16. Other information

The information contained in this SDS is, to the best of our knowledge true and accurate. Any recommendations or suggestions made are without guarantee, since the conditions of use are beyond our control.