

MATERIAL SAFETY DATA SHEET

1. General Information

Supplier :	D&J Chemicals Co., Ltd.
Trade Name :	L-Glutamic Acid
Molecular Formula:	HOOCCH ₂ CH(NH ₂)COOH
Molecular Weight:	147.13
CAS No:	56-86-0
EINECS No:	
Chemical family :	Organic Chemicals
Chemical Name:	Glutaminol; Glutaton; 2-aminopentanedioic acid; a-aminoglutaric acid

2. Physical Data Information

Appearance :	White crystals.
Odour :	No information found.
Melting Piont () :	205
Boliting point () :	269 ~ 271
Density (g cm-3):	
Specific Gravity:	1.538
Solubility :	No information found.

3. Hazards Identification

Emergency Overview:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Potential Health Effects

Inhalation:

No adverse health effects expected from inhalation.

Ingestion:

No adverse effects expected. Large doses may cause gastro-intestinal upset.

Skin Contact:

No adverse effects expected.

Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Not expected to require first aid measures. Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

Not expected to require first aid measures. Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Dry chemical, foam, water or carbon dioxide.

Special Information:

Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect from physical damage. Separate from oxidizing materials. Store in the dark. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

Not expected to require any special ventilation. A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage. For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:
Safety glasses.

9. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizers.

Conditions to Avoid:

Incompatibles.

10. Toxicology Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

11. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

12. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

13. Transport Information

Not regulated.

14. Other Information

NFPA Ratings: Health: 0 Flammability: 0 Reactivity: 0

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.

Revision Information:

No Changes.

Disclaimer:

The information above is believed to be accurate. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, of damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, even if the company has been advised of the possibility of such damages.