



L-Glutamic Acid Base FCC

MATERIAL SAFETY DATA SHEET

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SECTION 1 - IDENTITY

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- Common Name(used on label): Glutamic acid, purity 99% up
(Trade Name & Synonyms) Glutamic acid, Pharmaceutical Grade

 - Cas No. : 56-86-0 (Pass Food Chemicals Codex test)
EINECS No. : 200-293-7

 - Chemical Name : L-Glutamic acid

 - Chemical Family : α -Aminoglutaric acid

 - Formula : $C_5H_9NO_4$

SECTION 2 - HAZARDOUS INGREDIENTS

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- Principal Hazardous Component(s) : Does not apply
 - Percentage % : Does not apply
 - Threshold Limit Value(units) : Does not apply

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SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS(Fire & Explosion Data)

- Boiling Point : Does not apply
- Melting Point : 247-249°C
- Specific Gravity(H₂O=1) : 1.538
- Vapor Pressure(mm Hg) : Unavailable
- Percent Volatile by Volume(%) : Unavailable
- Vapor Density(Air=1) : Unavailable
- Evaporation Rate(_____ =1) : Unavailable
- Solubility in Water:
 - . 3.41 grams per 100 ml water at 0°C;
 - . 8.64 grams per 100 ml water at 25°C;
 - . 21.90 grams per 100 ml water at 50°C;
 - . 55.30 grams per 100 ml water at 75°C;
 - . 140.00 grams per 100 ml water at 100°C;

- Reactivity in Water: Not reactive

- Appearance and Odor:

White, practically odorless, free-flowing crystalline.

Naturally occurring dextrorotatory form with L-configuration.

- Flash Point : Does not apply
- Flammable Limit in Air % by Volume
 - . Lower : Does not apply
 - . Upper : Does not apply
- Extinguisher Media : Water, Carbon dioxide CO₂
- Auto-Ignition Temperature : Does not apply
- Special Fire Fighting Procedures : No special procedure is required.
- Unusual Fire and Explosion Hazards : None

SECTION 4 - PHYSICAL HAZARDS



- Stability
 - . Unstable / Stable : Stable
 - . Conditions to Avoid : Keep away from moisture, heat and sun ray
- Incompatibility(Material to Avoid) : Moisture
- Hazardous Decomposition Products : None
- Hazardous Polymerization
 - . May Occur / Will Not Occur : Will not occur
 - . Conditions to Avoid : None

SECTION 5 - HEALTH HAZARDS

- Threshold Limit Value : 9.45mg/Kg of body weight/day (of Human Intake)
- Signs & Symptoms of Exposure
 - 1. Acute Overexposure : Might cause little eye irritation
 - 2. Chronic Overexposure : Unavailable
- Medical Conditions Generally Aggravated by Exposure : Unavailable
- Chemical Listed as Careinogen or Potential Careinogen
 - . National Toxicology Program : Yes, No
 - . I.A.R.C. Monographs : Yes, No
 - . OSHA : Yes, No
- OSHA Permissible Exposure Limit : Unknown
- ACGIH Threshold Limit Value : Unknown
- Other Exposure Limit Used : Unknown

- Emergency and First Aid Procedures
 - 1. Inhalation:
Nothing hazardous. Remove to fresh air.
 - 2. Eyes:
Immediately flush eyes with water.
 - 3. Skin:
Wash skin with water.
 - 4. Ingestion:
Nothing.



SECTION 6 - SPECIAL PROTECTION INFORMATION

- Respiratory Protection : Not needed. But a mask is recommended if in close space.
(Specify Type)
- Ventilation
 - . Local Exhaust : Required
 - . Mechanical(General) : No
 - . Special : No
 - . Other : No
- Protective Glove : Not needed
- Eye Protection : Eye glasses is recommended.
- Other Protective Clothing or Equipment : Not needed.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

- Precautions to be Taken in Handling and Storage:
 - No special precaution are necessary in its handling.
 - Stored in a dry place and keep away from moisture, heat and sun ray.
- Other Precautions: No.
- Steps to be Taken in case Material is Released or Spilled:
 - Clean up by vacuum-cleaner and wash by water.
- Waste Disposal Methods: Wash away by water.

IMPORTANT

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.