



MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**
Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road
Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: L-Glutamic Acid

Catalog Numbers:
G014

Synonyms:
a-Aminoglutaric acid, 2-Aminopentanedioic acid, a-Glutamic acid, Levo-Glutamic acid.

Company Identification:
LEONID CHEMICALS
62/A-2 2nd Stage, Industrial Suburb
Yeshwanthpur, Bangalore -22, INDIA
Ph- +91-80-23378354

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	: 56-86-0
Chemical Name	: ALPHA-GLUTAMIC ACID
%	: > 99%
EINECS#	: 200-293-7
Hazard Symbols	: None Listed.
Risk Phrases	: None Listed.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Not available.

Potential Health Effects

Eye:
No information regarding eye irritation and other potential effects was found. Contact may cause transient eye irritation.

Skin:
No information regarding skin irritation and other potential effects was found.

Ingestion:
The toxicological properties of this substance have not been fully investigated.

Inhalation:
The toxicological properties of this substance have not been fully investigated.

Chronic:
No information found.



SECTION 4 - FIRST AID MEASURES

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear. Treat symptomatically.

Notes to Physician:

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing Media:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Sweep up, then place into a suitable container for disposal.

SECTION 7 - HANDLING AND STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Solid
Color	: White crystalline powder.
Odor	: None reported.
PH	: 3.3
Vapor Pressure	: Negligible.
Viscosity	: Not available.
Boiling Point	: 347 deg F
Freezing/Melting Point	: 436 deg F
Autoignition Temperature	: Not applicable.
Flash Point	: Not applicable.
Explosion Limits, lower	: Not available.
Explosion Limits, upper	: Not available.
Decomposition Temperature	: 347 F
Solubility in water	: Slightly soluble in water.
Specific Gravity/Density	: 1.54 (water=1)
Molecular Formula	: C5H9NO4
Molecular Weight	: 147.0673

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 56-86-0: LZ9700000

LD50/LC50:

CAS# 56-86-0: Oral, rabbit: LD50 = >2300 mg/kg; Oral, rat: LD50 = >30 gm/kg.

Carcinogenicity:

ALPHA-GLUTAMIC ACID -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Other

No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.*

Hazard Class: 6.1

UN Number: 2810

Packing Group: III

IMO

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2810

Packing Group: III

RID/ADR

Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2810

Packing group: III

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 56-86-0: 0

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 56-86-0 is listed on Canada's DSL List.

CAS# 56-86-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 56-86-0: OEL-RUSSIA:STEL 10 mg/m³

US FEDERAL

TSCA

CAS# 56-86-0 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 3/14/1995 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. 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, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.