

Material Safety Data Sheet

SUBJECT: L-Glutamic acid

1.Product and Company Identification:

Product Name: L-Glutamic acid Chemical Name: L-Glutamic acid Synonym: L (+) -Glutamic acid; 2-Aminoglutaric acid Chemical Formula: C₅H₉NO₄ Manufacturer/Supplier: XINYI (H.K.) INDUSTRIAL CO., LTD. RM 1402,YuKun Meicheng Building, No. 33, HaiYu North Road, Changshu, Jiangsu Province, China Tel: +86 512 52933216 Fax: +86 512 52933236

2.Hazards Identification:

Appearance: white crystalline powder.

Caution! May cause respiratory tract irritation. May be absorbed through intact skin. May cause eye and skin irritation.

Target Organs: No data found.

Target Organs: None known.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. Low hazard for usual industrial handling. May be absorbed through the skin.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Low hazard for usual industrial handling.

Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling. **Chronic:** No information found.

3. Composition and Information on Ingredients:

Composition:

Chemical Name: L-Glutamic acid CAS # 56-86-0 Purity:100%

4.First-aid measurements:

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids

open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact: No known effect on skin contact, rinse with water for a few minutes.

Serious Skin Contact: Not available.



Inhalation: Allow the victim to **Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

5.Fire-Fighting Measurements:

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Flash Point: Not applicable.
Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

6.Accidental Release Measurements:

General Information: Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

7.Handling and Storage:

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8.Exposure Controls / Personal Protection:

Engineering Controls: Use adequate ventilation to keep airborne concentrations low. **Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
L-Glutamic acid	none listed	none listed	none listed



OSHA Vacated PELs: L-Glutamic acid: No OSHA Vacated PELs are listed for this chemical.

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. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9.Physical and Chemical Protection

Physical State: Crystalline powder
Appearance: white
Odor: none reported .
pH: (1% soln/water.): 3.0~3.5.
Vapor Pressure: Negligible.
Vapor Density: Not available.
Evaporation Rate: Negligible.
Viscosity: Not available.
Boiling Point: Not available.

Decomposition Temperature: 205°C

 $\label{eq:solubility: (H_2O, g/100g): 0.72 (20^\circ), 1.51 (40^\circ), 3.17 (60^\circ) \\ \mbox{Molecular Formula: $C_5H_9NO_4$} \\ \mbox{Molecular Weight: 147.13} \\$

10.Stability and reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat.
Incompatibilities with Other Materials: Alkalies, strong oxidizing agents.
Hazardous Decomposition Products: Hydrogen chloride, chlorine, nitrogen oxides, carbon monoxide, carbon monoxide, ethyl alcohol.
Hazardous Polymerization: Will not occur.

11.Toxicological Information RTECS#: CAS# 56-86-0: LD50/LC50: Not available. Carcinogenicity: CAS# 56-86-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available.



Mutagenicity: No information available. **Neurotoxicity:** No information available.

12.Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic. Special Remarks on the Products of Biodegradation: Not available.

13.Disposal Consideration

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

14.Transport and Regulatory Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Transport IMDG

The product is not subject to IMDG regulations.

15.Other Regulatory Information

US FEDERAL

TSCA

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

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.



Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 56-86-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice

immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 56-86-0: 0

Canada - DSL/NDSL

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

Canada - WHMIS

WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

16.Other Information

Disclaimer: The information provided on this 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.