

GAMMA AMINO BUTRYIC ACID

1.-IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

1.1.-Identification of the substance or preparation

Chemical name

Trade name

CAS RN

Chemical family

Chemical formula

Acidum-4-aminobutyricum

Acidum-4-aminobutyricum (Gamma amino butyric acid)

56-12-2

A amino acid derivative

C4 H9NO2

1.2.-Company/undertaking identification

| Company | Lianyungang Hengfei Pharmaceutical Co.,LTD. |
|--|--|
| Person | Jufang Zhou |
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| Plants | 086-0576-8517329 |
| National Service of Toxicological Information | |

2.-COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance used in Material as Alendronic acid and used in Material drug as debasing ammonia chroma in blood.



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3.-HAZARDS IDENTIFICATION

| | 3.1Critical hazards to man | Harmful in contact with skin. Irritating to eyes. |
|-----------|--|--|
| | 3.2Criticals hazards to environment | Not known to be hazardous to water. |
| <u>4F</u> | FIRST AID MEASURES | |
| | 4.1General | Symptoms of poisoning may ever occur after several hours; therefore provide medical observation for at least 48 hours after the accident. |
| | 4.2Inhalation | Supply fresh air; consult doctor in case of complaints. |
| | 4.3Skin Contact | Immediately wash with water and soap and rinse thoroughly. |
| | 4.4Eye Contact | Rinse opened eye for 15 minutes under running water. Then consult a doctor. |
| | 4.5Ingestion | Immediately call a doctor. Show this label. |
| <u>5F</u> | FIRE FIGHTING MEASURES | |
| | 5.1Suitable extinguishing media | CO2, extinguishing powder or water spray. Fight larger fires with water or alcohol resistant foam. |
| | 5.2Extinguishing media which must not be used for safety reasons | Not applicable. |
| | 5.3Special exposure hazards | Emits toxic fumes under fire conditions. |
| | 5.4Special protective equipment for firefighters | Wear self-contained respiratory protective device. Wear fully protective suit. |



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6.-ACCIDENTAL RELEASE MEASURES

| 6.1Personal precautions | Wear protective equipment. Keep unprotected person away. |
|------------------------------|---|
| 6.2Environmental precautions | |
| 6.3Methods for cleaning up | Ensure adequate ventilation. Dispose of the collected material according to regulations Wipe up with dampsponge or mop. Immediately remove all soiled and contaminated clothing. |

7.-HANDLING AND STORAGE

| 7.1Handling | Prevent formation of dust. Ensure good ventilation / exhaustion at the work place. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. |
|-------------|---|
| 7.2Storage | Preserved in tight ,light -resistant container. Avoid excessive moistly |

8.-EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1.-Specific control parameters

| Engineering measures | Refer to section 7.1 |
|----------------------|----------------------|
| Limit values | Not found. |
| Biological standards | Not found. |





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8.2.-Adequate equipment to provide suitable protection

| Respiratory protection | Use an approved respirator. |
|------------------------------|--|
| Hand protection | Chemical resistant gloves. |
| Eye protection | Safety tightly sealed goggles. |
| Skin protection | Protect exposed skin. |
| 8.3Specific hygiene measures | Keep away from foodstuffs, beverages and feed. |

9.-PHYSICAL AND CHEMICAL PROPERTIES

| 9.1Appearance | Almost white crystal or crystalline powder |
|--------------------------------|---|
| 9.2Odour | Characteristic. |
| 9.3pH | 6.0-8.0 |
| 9.4Boiling point/boiling range | Not found. |
| 9.5Melting point/melting range | 197-203 ℃ |
| 9.6Flash point | Not found. |
| 9.7Flammability | Not found. |
| 9.8Autoflammability | Not found. |
| 9.9Explosive properties | Product does not present an explosion hazard. |



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| | 9.10Oxidizing properties | Not applicable. |
|-------------------|--|---|
| | 9.11Vapour pressure | Not found. |
| | 9.12Relative density | Not found. |
| | 9.13Solubility | Soluble in water |
| | 9.14Partition Coefficient | Not found. |
| | 9.15Other data | |
| <u>10</u> Stat | STABILITY AND REACTIVITY Die | |
| | 10.1Conditions to avoid | No decomposition if used according to specifications. |
| | 10.2Materials to avoid | Oxidizers |
| | 10.3Hazardous decomposition products | |
| | Presence of stabilizers | Not applicable |
| | Need of stabilizers | Not applicable |
| | Dangerous products of decomposition | Poisonous gases/vapors |
| | Safety significance of a change in physical appearance | Not found |
| | Hazardous decomposition products formed upon contact with water | Not applicable |
| | Possibility of degradation to unstable products | No dangerous reactions known. |



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11.-TOXICOLOGICAL INFORMATION

11.1.-Dangerous-to-health effects/symptoms By inhalation Irritant to mucous membranes.

By skin contact

Irritant. Harmful. Possible sensitization through skin contact.

By eye contact

Irritating effect.

11.2.-Immediate/chronic effects from short and long term exposure People with known or suspected allergies to antibiotics should use appropriate safety precautions when handling. People that are allergic to antibiotics may experience eye, skin and respiratory irritation. RTECS nº: VB1993650

12.-ECOLOGICAL INFORMATION

12.1.-Possible effects, behaviour and environmental fate of substance

| Mobility | Not found. |
|---|--|
| Persistence and degradability | Not found. |
| Bioaccumulative potential | Not found. |
| Aquatic toxicity and other data relating to ecotoxicity | Not found. |
| Other information | The ecological effects have not been thoroughly investigated, and currently none have been identified. |

13.-DISPOSAL CONSIDERATIONS



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| 13.1Information residues | on | safe | handling | Refer to sections 7.1 and 8.2 |
|---------------------------|--------|---------|------------|---|
| 13.2Methods for a | dispos | al prod | uct | Disposal must be made according to state and local regulations. |
| 13.3Methods for packaging | dispo | sal cor | ntaminated | Disposal must be made according to state and local regulations. |

14.-TRANSPORT INFORMATION

14.1.-Special precautions

Not applicable.

14.2.-United Nations Recommendation or Not applicable. international agreements on the transport and packaging of dangerous goods

15.-REGULATORY INFORMATION

Symbol: Xn (harmful) R Phrases: 21 Harmful in contact with skin. 36 Irritating to eyes. S Phrases: 7 Keep away from food, drink and animal feeding stuffs. 15 Keep away from heat.

16.-OTHER INFORMATION

The data contained herein are based on the information currently available to us and believed to be accurate and reliable. Users should make their own investigations to determine the suitability of the information for their purpose. Nothing contained herein is intended as permission, inducement or recommendation to violate any laws or to practice any invention covered by existing patents.



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| To Substitute: Feb. 12, 05 | Substituted by: |