

# MATERIAL SAFETY DATA SHEET

## Chemical Product

Product Name: P-Amino butyric acid

CAS#: 56-12-2

C.I. No.: Not applicable.

Synonym: Gammalon, Gamarex; 4-Aminobutanoic Acid; GABA; gamma-Aminobutyric Acid; gamma-Amino-n-butyric Acid; Piperidic Acid; Piperidinic Acid

Chemical Name: 4-Aminobutyric Acid

Chemical Formula: C<sub>4</sub>-H<sub>9</sub>-N-O<sub>2</sub>

## Composition and Information on Ingredients

Name	S.K.U	% by Weight
P-Amino butyric acid	GCS-1276	100

## Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of ingestion, of inhalation.

Potential Chronic Health Effects CARCINOGENIC EFFECTS:

Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

## First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti- bacterial cream. Seek medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

## Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: CLOSED CUP: 195°C (383°F).

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...). Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances: Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures Special Remarks on Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

## Accidental Release Measures

### Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

### Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and

show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

**Storage:**

Keep container tightly closed. Keep container in a cool, well-ventilated area.

## Exposure Controls/Personal Protection

**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

## Physical and Chemical Properties

Physical state and appearance: Solid. (Crystalline solid.)

Odor : Not available.

Taste : Not available.

Molecular Weight : 103.12 g/mole

Color : White

pH (1% soln/water) : Not available.

Boiling Point : Not available.

Melting Point : Decomposition temperature: 202°C (395.6°F)

Flash Point : Not available.

Critical Temperature : Not available.

Specific Gravity : Not available.

Vapor Pressure : Not applicable.

Vapor Density : Not available.

Volatility : Not available.

Odor Threshold : Not available.

Water/Oil Dist. Coeff. : Not available

Ionicity (in Water) : Not available.

Dispersion Properties : See solubility in water.

Solubility : Partially soluble in cold water, hot Water.

## Stability and Reactivity Data

Stability: The product is stable.  
Instability Temperature: Not available.  
Conditions of Instability: Excess heat, incompatible materials.  
Incompatibility with various substances: Reactive with oxidizing agents. Corrosivity: Non-corrosive in presence of glass.  
Special Remarks on Reactivity: Not available.  
Special Remarks on Corrosivity: Not available.  
Polymerization: Will not occur.

## Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.  
Toxicity to Animals: Acute oral toxicity (LD50): 12680 mg/kg [Mouse].  
Chronic Effects on Humans: Not available.  
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant). Slightly hazardous in case of ingestion, of inhalation.  
Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available

Special Remarks on other Toxic Effects on Humans: Skin: May cause skin irritation Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Toxicological Data on Ingredients: 4-Aminobutyric acid: ORAL (LD50): Acute: 12680 mg/kg [Mouse].

## 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

## Disposal Considerations

Waste Disposal:

## Transformation Information

Land transport (ADR-RID)

General information: Not regulated.

Sea transport (IMDG) [English only]

General information: Not regulated.

Air transport (ICAO-IATA) [English only]

General information: Not regulated.

## Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: 4-Aminobutyric acid

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R36/38- Irritating to eyes and skin. S24/25- Avoid contact with skin and eyes. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

### HMIS (U.S.A.):

Health Hazard: 2

### Fire Hazard: 1

Reactivity: 0

### Personal Protection: E

National Fire Protection Association (U.S.A.):

### Health: 2

Flammability: 1

### Reactivity: 0

Specific hazard:

### Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

## Additional Information



References: Not available.

Other Special Considerations: Not available.

## ***Disclaimer:***

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