



TECHNICAL DATA SHEET

Gamma-Aminobutyric Acid (GABA) Food Grade

◆ Product Information

Item	Description
Product Name	Gamma-Aminobutyric Acid
Synonym	GABA
Chemical Name	γ -Aminobutyric Acid
Molecular Formula	$C_4H_9NO_2$
Molecular Weight	103.12
CAS No.	56-12-2
EINECS No.	200-258-6
EC No.	200-258-6
Grade	Food Grade
Origin	China

Manufacturing Process Microbial Fermentation

◆ Specification

Parameter	Specification
Appearance	White crystalline powder
Assay (HPLC), %	≥ 99.0
Identification	Positive
pH (5% Solution)	6.5 – 7.5
Loss on Drying, %	≤ 1.0
Residue on Ignition, %	≤ 0.10
Heavy Metals (as Pb), mg/kg	≤ 10
Lead (Pb), mg/kg	≤ 2
Arsenic (As), mg/kg	≤ 2
Mercury (Hg), mg/kg	≤ 0.1
Cadmium (Cd), mg/kg	≤ 1
Total Plate Count	$\leq 1,000$ CFU/g
Yeast & Mold	≤ 100 CFU/g
Escherichia coli	Negative
Salmonella	Negative / 25 g

◆ Physical & Chemical Properties

Property	Value
Appearance	White crystalline powder

Odor Odorless or nearly odorless

Solubility Freely soluble in water, practically insoluble in ethanol and ether

Melting Point Approximately 195–205°C (decomposition)

◆ **Functions**

- Nutritional ingredient
- Functional food ingredient
- Flavor enhancer in certain applications
- Fermentation-derived amino acid
- Widely used in dietary supplements and health food formulations

◆ **Applications**

Gamma-Aminobutyric Acid (GABA) Food Grade is widely used in:

- Dietary Supplements
- Functional Foods
- Functional Beverages
- Solid Drinks
- Tablets
- Hard Capsules
- Softgels
- Powder Blends
- Nutrition Products
- Sports Nutrition
- Healthy Snacks

◆ **Recommended Dosage**

The recommended usage level depends on local food regulations and the intended application. Customers should comply with the applicable regulations of the destination country.

◆ **Packaging**

Packaging Type	Net Weight
Aluminum Foil Bag	1 kg / 5 kg
Fiber Drum with Double PE Inner Bags	20 kg / 25 kg
Customized Packaging	Available

◆ **Storage**

Store in a cool, dry, and well-ventilated place. Protect from moisture, direct sunlight, and excessive heat. Keep the container tightly closed after opening.

◆ **Shelf Life**

24 months from the date of manufacture when stored in the original unopened packaging under recommended storage conditions.

◆ **Regulatory Status**

- Manufactured by microbial fermentation.
- Suitable for food and dietary supplement applications.
- Non-GMO (available upon request, if applicable).
- Gluten Free (available upon request).
- Allergen Free (available upon request).

- BSE/TSE Free.
- Halal Certificate: Available upon request.
- Kosher Certificate: Available upon request.
- ISO 22000 / FSSC 22000 manufactured (depending on production facility).

◆ Safety Information

This product should be handled in accordance with good industrial hygiene and safety practices. Appropriate personal protective equipment is recommended during handling. Refer to the latest Safety Data Sheet (SDS/MSDS) for detailed safety information.

◆ Typical Nutritional Information

Item	Typical Value
Energy	Not Significant
Protein	>99% (as amino acid)
Fat	Nil
Carbohydrate	Nil

◆ Disclaimer

The information contained in this Technical Data Sheet is based on our present knowledge and production experience. It is provided for guidance purposes only and does not constitute a warranty or guarantee of product performance. Users are responsible for determining the suitability of the product for their specific applications and for complying with all applicable local laws and regulations.

