

## TECHNICAL DATA SHEET

### Calcium Butyrate

*Feed Grade Butyrate Salt for Animal and Aquaculture Feed*

#### Product Description

Calcium Butyrate is a feed grade calcium salt of butyric acid supplied as powder, uncoated granule, or coated granule according to formulation requirements. It is used in compound feed, premixes, and aquaculture feed as a practical butyrate source for gut health support, intestinal environment management, and feed formulation flexibility. Compared with free butyric acid, Calcium Butyrate provides better handling convenience, lower volatility, and easier incorporation into dry feed systems. Coated and granular forms may be selected where odor control, flowability, mixing performance, or more gradual release is required. The product is suitable for poultry, swine, ruminant, pet food, and aquatic feed applications, subject to local feed regulations and customer formulation objectives.

#### 1. Product Identification

<b>Product Name</b>	Calcium Butyrate
<b>Chemical Name</b>	Calcium butyrate / Calcium dibutyrate
<b>CAS No.</b>	5743-36-2
<b>Molecular Formula</b>	C <sub>8</sub> H <sub>14</sub> CaO <sub>4</sub>
<b>Molecular Weight</b>	214.27 g/mol
<b>Grade</b>	Feed Grade
<b>HS CODE</b>	291560
<b>Appearance</b>	White powder or white grain, no caking
<b>Primary Function</b>	Butyrate source for digestive support, gut environment management, and functional feed application

<b>UNIT:MT</b>	Covered the pallets	Without pallets
<b>20'FCL</b>	14	15
<b>40'FCL</b>	28	28
<b>Packing</b>	25KGS/BAG	700KGS/BAG



## 2. Typical Specification

Items	Grade 1	Grade 2	Grade 4
Product form	Powder	Granule	Coated granule
Appearance	White powder	White grain, no caking	White grain, no caking
Calcium Butyrate Content, %	≥ 95.0	≥ 95.0	≥ 94.0
pH value (1.0 g / 50 ml aqueous solution)	7.0 - 10.0	7.0 - 10.0	7.0 - 10.0
Drying Loss, %	≤ 5.0	≤ 5.0	≤ 5.0
Heavy Metals (as Pb), %	≤ 0.001	≤ 0.001	≤ 0.001
Arsenic (As), %	≤ 0.0002	≤ 0.0002	≤ 0.0002

## 3. Applications and Benefits

### Digestive support and intestinal environment management

Calcium Butyrate is used in feed programs where nutritionists aim to support intestinal condition, nutrient utilization, and stable performance. Butyrate salts are commonly selected as functional ingredients for young animals, high-density farming systems, and formulas exposed to nutritional or environmental stress. The calcium salt form provides practical handling properties and can be blended with grains, protein meals, minerals, vitamins, enzymes, probiotics, acidifiers, and other feed additives. Uniform mixing is important to ensure consistent distribution in the finished feed. The final use level should be determined according to species, animal age, diet composition, production target, and local feed regulations.

### Application in poultry and swine feed

In poultry and swine feed, Calcium Butyrate can be incorporated into starter feed, grower feed, premixes, and functional additive blends. It is useful where digestive stability, feed conversion, and gut environment support are important formulation objectives. For young animals, feed transition, stocking density, heat stress, or management changes may increase nutritional pressure, so a well-designed diet can include butyrate salts as part of a broader gut health strategy. Powder grades are convenient for premix production, while granule or coated grades may be selected when lower odor, better flowability, or controlled release characteristics are required.

### Application in ruminant, pet, and aquaculture feed

Calcium Butyrate can also be used in ruminant, pet, and aquaculture feed systems when compatible with the target formula. In ruminant nutrition, it may be included in concentrates, mineral premixes, or functional blends according to the feeding system. In pet food and aquaculture diets, attention should be paid to palatability, processing conditions, coating integrity, particle size, and finished product stability. Aquafeed may undergo extrusion, pelleting, drying, or oil coating, so the selected grade should match the manufacturing process and the desired release profile. Pilot testing is recommended before full-scale application.

**Form selection, processing, and quality control**

Different grades of Calcium Butyrate allow feed producers to choose the form that best matches their production and application needs. Powder is suitable for standard premix and dry blending. Uncoated granule may improve flowability and reduce dust compared with fine powder. Coated granule may be preferred where odor management, handling comfort, and gradual release are important. During manufacturing, the product should be stored dry, weighed accurately, and mixed thoroughly to avoid segregation. Quality control should focus on appearance, assay, pH, drying loss, heavy metals, arsenic, packaging integrity, and batch traceability.

**4. Handling and Safety**

Avoid inhalation of dust during handling. Use appropriate ventilation, dust mask, gloves, and eye protection where necessary. Wash hands after use and follow good industrial hygiene practices. The product is intended for feed use only and should be handled according to local feed safety regulations and the customer's quality management system.