

## TECHNICAL DATA SHEET

### Sodium Propionate

*Feed Grade Mold Inhibitor and Organic Acid Salt for Animal Feed*

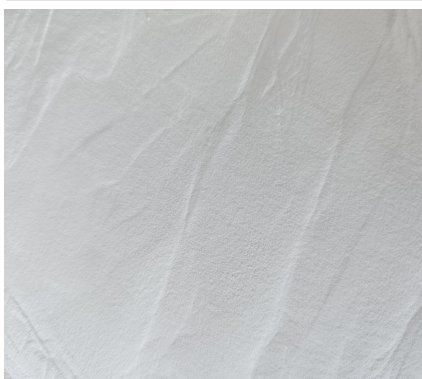
#### Product Description

Sodium Propionate is a feed grade organic acid salt supplied as a white crystalline powder or granule. It is widely used in compound feed, premixes, and raw material preservation systems as a practical mold inhibitor and feed hygiene additive. As the sodium salt of propionic acid, it provides effective propionate activity while offering better handling convenience than free propionic acid. The product is suitable for poultry, swine, ruminant, pet, and aquaculture feed applications where moisture control, storage stability, and feed freshness are important. In feed manufacturing, Sodium Propionate can help reduce mold risk, support consistent feed quality, and improve formulation flexibility in preservation programs based on organic acid salts.

#### 1. Product Identification

<b>Product Name</b>	Sodium Propionate
<b>Chemical Name</b>	Sodium propanoate / Sodium propionate
<b>CAS No.</b>	137-40-6
<b>Molecular Formula</b>	C <sub>3</sub> H <sub>5</sub> NaO <sub>2</sub>
<b>Molecular Weight</b>	96.06 g/mol
<b>HS CODE</b>	291550
<b>Grade</b>	Feed Grade
<b>Appearance</b>	White crystalline powder or granule
<b>Primary Function</b>	Organic acid salt for mold inhibition and feed preservation

<b>UUNIT:MT</b>	<b>Covered the pallets</b>	<b>Without pallets</b>
<b>20'FCL</b>	<b>17</b>	<b>19</b>
<b>40'FCL</b>	<b>28</b>	<b>28</b>



## 2. Typical Specification

Items	Standard
Appearance	White crystalline powder or granule
Assay, %	≥ 99.0
Loss on Drying, %	≤ 1.0
Water Insoluble Matter, %	≤ 0.1
Alkalinity as Na <sub>2</sub> CO <sub>3</sub> , %	≤ 0.15
Heavy Metals (as Pb), mg/kg	≤ 10
Arsenic (As), mg/kg	≤ 3
Lead (Pb), mg/kg	≤ 2

## 3. Applications and Benefits

### Mold inhibition and feed preservation

Sodium Propionate is primarily used in feed as a mold inhibitor and preservative ingredient. Compound feed, premixes, grains, oilseed meals, and by-products may be exposed to moisture, heat, and long storage periods, which can increase the risk of mold growth and feed quality loss. By supplying propionate activity in a stable salt form, Sodium Propionate helps create conditions that are less favorable for mold development. It is especially useful in feeds that contain higher moisture raw materials or are stored in warm and humid environments. When used as part of a complete feed hygiene program, it helps maintain freshness, reduce spoilage risk, and support more consistent feed quality from production to final use.

### Application in poultry, swine, and ruminant feed

In livestock nutrition, Sodium Propionate can be incorporated into poultry, swine, and ruminant feed formulas to support feed stability and storage performance. Feed ingredients often vary in moisture level, microbial load, and storage history, so preservation measures are important for maintaining reliable quality. Sodium Propionate is compatible with common grains, protein meals, minerals, vitamins, and premix components. It can be used in mash feed, pelleted feed, concentrates, and mineral premixes according to formulation objectives and local regulatory requirements. In ruminant feed, it may also provide a source of propionate-related organic acid activity while contributing to preservation. Proper mixing uniformity, moisture control, and packaging are important to ensure stable performance in finished feed.

### Application in aquaculture and pet feed systems

Sodium Propionate is suitable for aquaculture and pet feed systems where finished feed quality, palatability, and storage stability are important. Fish and shrimp feeds often contain protein-rich ingredients, oils, and functional additives that require careful handling to maintain freshness during transportation and storage. Sodium Propionate can be used in extruded floating feeds,

sinking pellets, shrimp feed, and pet food formulas when properly blended with other ingredients. It helps formulators design preservation systems aimed at reducing mold risk and supporting consistent product appearance and quality. For aquaculture use, attention should be paid to particle size, even distribution, processing temperature, and compatibility with binders, coating oils, vitamins, and other heat-sensitive feed additives.

#### **Handling advantages and formulation flexibility**

Compared with liquid propionic acid, Sodium Propionate offers practical advantages in feed manufacturing, including easier dosing, lower volatility, reduced corrosiveness, and improved operator convenience. Its powder or granular form allows it to be added to premixes or complete feed using standard dry mixing equipment. It can also be combined with other organic acid salts, acidifiers, antioxidants, mold inhibitors, enzymes, and microbial products when a broader feed quality program is required. The product should be stored in a dry environment and protected from excessive moisture to avoid caking and loss of flowability. Clean handling, proper packaging, and good manufacturing practices help ensure that Sodium Propionate remains stable and performs consistently in finished feed products.

#### **4. Packaging, Storage, and Shelf Life**

Standard packaging: 25 kg net kraft paper bag with PE liner, woven bag with inner liner, or according to customer requirement. Storage: Keep tightly closed in a cool, dry, clean, and well-ventilated warehouse. Avoid moisture, heat, direct sunlight, strong oxidizing agents, and contamination with odorous or incompatible materials. Shelf life: 24 months from production date under recommended storage conditions in original unopened packaging.

#### **5. 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.