

TECHNICAL DATA SHEET

Benzoic Acid

Feed Grade Acidifier and Feed Hygiene Support Additive for Animal and Aquaculture Feed

Product Description

Benzoic Acid is a feed grade organic acid supplied as a white crystalline powder or flakes. It is widely used in compound feed, premixes, and aquaculture feed as an acidifier and feed hygiene support ingredient. In animal nutrition, Benzoic Acid is valued for helping maintain a suitable digestive environment, supporting feed freshness, and contributing to stable performance under intensive production conditions. It has relatively good stability in dry feed systems and can be incorporated into formulas for swine, poultry, ruminants, and aquatic species according to nutritional objectives and local regulations. The product is particularly suitable for feed programs focused on gut environment management, microbial control support, feed quality preservation, and formulation flexibility.

1. Product Identification

Product Name	Benzoic Acid
Chemical Name	Benzenecarboxylic acid / Benzoic acid
CAS No.	65-85-0
Molecular Formula	C ₇ H ₆ O ₂
HS CODE	291631
Molecular Weight	122.12 g/mol
Grade	Feed Grade
Appearance	White crystalline powder or flakes
Primary Function	Organic acidifier for feed hygiene support and digestive environment management

UNIT:MT	Covered the pallets	Without pallets
20'FCL	16	19.5
40'FCL	28	28



2. Typical Specification

Items	Standard
Appearance	White granule
Content (purity), %	99.5
Melting Point, °C	121-123
Chroma, Hazen	≤40
Moisture, %	≤0.5
Phthalic acid, mg/Kg	≤50
Biphenyls, mg/Kg	≤50
Arsenic (AS), mg/Kg	≤2
Heavy metals (Pb), %	≤0.001
Chloride (Cl), %	≤0.014
Easy oxide	PASS

3. Applications and Benefits

Acidification support for digestive environment management

Benzoic Acid is used in feed as an effective organic acid ingredient to support digestive environment management. In animal production, a stable intestinal environment is important for nutrient digestion, feed utilization, and normal growth. Benzoic Acid can help formulate diets with acidification targets, especially when feed ingredients vary in quality or animals face stress from weaning, feed transition, transport, stocking density, or environmental changes. It is suitable for use in feed programs where nutritionists aim to support gut comfort and reduce nutritional stress through balanced formulation. When combined with appropriate protein sources, energy ingredients, minerals, vitamins, enzymes, probiotics, or other acidifiers, Benzoic Acid helps build feed formulas focused on digestive stability, hygiene, and consistent animal performance.

Feed hygiene and preservation support in compound feed

As an organic acid, Benzoic Acid can contribute to feed hygiene support by helping create conditions less favorable for undesirable microbial growth in feed systems. It is particularly useful in compound feed, premixes, and concentrates where freshness, storage stability, and ingredient quality are important. Feed exposed to moisture, warm storage conditions, or long transport times may face higher risk of quality deterioration, so hygiene-support additives can be valuable in a complete feed management program. Benzoic Acid is easy to handle as a dry crystalline material and can be distributed evenly when properly mixed. It should be used together with good manufacturing practices, clean equipment, suitable packaging, and moisture control to support consistent finished feed quality.

Application in livestock feed for swine, poultry, and ruminants

Benzoic Acid can be applied in swine, poultry, and ruminant feed formulas where acidification, feed quality, and digestive support are important formulation objectives. In swine nutrition, it is often considered in programs for young animals and growing pigs where gut environment and feed conversion are key concerns. In poultry feed, it can be used as part of a broader approach to feed hygiene and intestinal performance support. For ruminants, Benzoic

Acid may be incorporated into premixes or complete feed when compatible with the target formulation and feeding system. The product should be blended uniformly and evaluated together with diet composition, animal stage, production goal, and local feed regulations to ensure suitable application.

Use in aquaculture feed for fish and shrimp

Benzoic Acid is also suitable for aquaculture feed applications, including fish and shrimp diets, where feed hygiene, palatability, and nutrient utilization are important for stable production. Aquatic feeds are often processed into extruded floating pellets, sinking pellets, or shrimp feed, and the final product must maintain good physical quality during storage and feeding. Benzoic Acid can support functional aquafeed formulations designed to manage feed freshness and digestive environment under intensive farming conditions. For aquaculture use, attention should be paid to particle size, mixing uniformity, compatibility with binders and coating systems, and processing conditions. Proper storage away from moisture and heat is important to maintain product quality and ensure even distribution in finished feed.

4. Packaging, Storage, and Shelf Life

Standard packaging: 25 kg net kraft paper bag with PE liner, aluminum foil bag, 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, alkalis, and contamination with odorous or incompatible materials.

Shelf life: 24 months from production date under recommended storage conditions in original unopened packaging.