

# TECHNICAL DATA SHEET

## Sorbic Acid

*Feed Grade Mold Inhibitor / Organic Acid Preservative*

### Product Description

Sorbic Acid is an unsaturated organic acid supplied as a white to slightly off-white crystalline powder or granule with a faint characteristic odor. It is widely used as a preservative and mold inhibitor in feed-related applications, especially where control of yeast, mold, and spoilage microorganisms is required. The product provides reliable antimicrobial activity at suitable pH conditions, supports storage stability, and can be incorporated into dry premixes, compound feed, and specialized additive systems.

### 1. Product Identification

<b>Product Name</b>	Sorbic Acid
<b>Chemical Name</b>	2,4-Hexadienoic acid
<b>CAS No.</b>	110-44-1
<b>E No. / INS No.</b>	E200 / INS 200
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>8</sub> O <sub>2</sub>
<b>HS CODE</b>	291619
<b>Molecular Weight</b>	112.13 g/mol
<b>Appearance</b>	White to slightly off-white crystalline powder or granule

UNIT:MT	Covered the pallets	Without pallets
20'FCL	15	19
40'FCL	28	28



## 2. Typical Specification

Item	Specification	Method / Note
Appearance	White to slightly off-white crystalline powder or granule	Visual
Assay (as C <sub>6</sub> H <sub>8</sub> O <sub>2</sub> )	99.0% - 101.0%	Dry basis
Melting Range	132 - 135°C	Reference method
Loss on Drying	0.5% max.	105°C
Residue on Ignition	0.2% max.	Reference method
Aldehydes (as formaldehyde)	0.1% max.	As applicable
Heavy Metals (as Pb)	10 mg/kg max.	As applicable
Arsenic (As)	3 mg/kg max.	As applicable
Lead (Pb)	2 mg/kg max.	As applicable
Mercury (Hg)	1 mg/kg max.	As applicable

## 3. Applications and Benefits

### Mold control in compound feed and feed materials

Sorbic Acid is used in feed systems to help inhibit mold and yeast growth in compound feed, concentrates, premixes, and selected raw materials. By reducing microbial spoilage, it helps protect nutrient value, odor quality, and palatability during storage and transport. Its antimicrobial effect is especially useful when feed materials are exposed to warm or humid conditions, or when long distribution periods increase the risk of visible mold. The product can be dry blended into mash feed, carriers, mineral mixes, or additive premixes before final processing. For effective performance, Sorbic Acid should be dispersed uniformly and used together with good moisture control, clean production practice, and suitable packaging. Application levels should be adjusted according to feed composition, moisture content, storage duration, and local feed regulations.

### Support for feed freshness and animal intake

Feed freshness is closely related to animal acceptance, stable intake, and predictable overall performance. Sorbic Acid helps maintain freshness by limiting the development of spoilage organisms that may produce unpleasant odors, discoloration, caking, or quality loss. In practical feed programs, this can support more consistent sensory quality from production to feeding, particularly in products containing higher-risk ingredients such as grain by-products, protein meals, or moisture-sensitive carriers. The product does not replace balanced formulation or hygienic handling, but it can be an important part of a preservation strategy. It is suitable for dry systems where accurate dosing and low moisture contribution are preferred. Uniform mixing, proper raw

material inspection, and routine monitoring of storage conditions are recommended to achieve reliable results.

#### **Premix formulation and dry-blend compatibility**

Sorbic Acid is appropriate for premix manufacturers that require a concentrated, dry organic acid preservative with good handling characteristics. It can be incorporated into mold inhibitor blends, acidifier systems, carrier-based premixes, and customized feed additive formulations. Because it is supplied as a crystalline powder or granule, it can be weighed, dosed, and mixed using common dry-blending equipment. The product is compatible with many carriers, minerals, organic acids, and functional additives, although compatibility should be confirmed for each formulation. Particle size, bulk density, and blending order should be considered to minimize segregation and improve distribution in the final product. When used in premixes, the final inclusion rate must be calculated according to the target dosage in finished feed and applicable regulatory limits.

#### **Storage stability and quality assurance management**

Sorbic Acid supports quality assurance programs by reducing the risk of microbial deterioration during warehousing, export shipment, and downstream distribution. It is especially valuable for products that may experience temperature changes, humidity exposure, or extended storage before use. The material should be kept in original sealed packaging and stored in a cool, dry, clean, and well-ventilated warehouse away from moisture, strong oxidizing agents, and alkaline materials. Once opened, the bag should be resealed tightly to prevent moisture absorption and contamination. For consistent performance, manufacturers should combine Sorbic Acid use with raw material control, moisture testing, sanitation, packaging integrity checks, and verification of dosage accuracy. It should be treated as one element of a broader feed preservation and quality control system.