

SPECIFICATION

Product Name: Sodium Nitrate Powder Food Grade
Chemical Formula: NaNO ₃
CAS Number: 7631-99-4
Molecular Weight: 84.9947 g/mol
Appearance: White crystalline powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Purity on 100% basis / Dry basis	%	99.4%	Min. 99%
Matter insoluble in water	%	0.03%	Max. 0.05%
Loss on drying	%	0.2%	Max. 0.50%
Moisture and volatile matter	%	Complies	Max. 0.05%
Chloride	PPM	Complies	Below 50 PPM
Iron	%	Nil	Max. 0.005%
Sulphate	%	0.25%	Max. 0.5%

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Insoluble in acetone.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated place. Keep the container tightly closed to protect from moisture and contamination. Store away from heat, direct sunlight, combustible materials, reducing agents, organic materials, and incompatible chemicals, as sodium nitrate is a strong oxidizing agent. Keep in the original, properly labeled container.

Applications

- Use: Widely used as a curing agent and preservative in certain meat and poultry products, where permitted by food regulations. It helps inhibit the growth of *Clostridium botulinum*, contributes to the characteristic color and flavor of cured meats, and extends shelf life. It is also used in laboratory and industrial applications as an oxidizing agent.

- Dosage: Depends on the intended application and applicable food regulations. In food products, it should only be used within the maximum limits permitted by the relevant regulatory authority (such as FSSAI, FDA, or EFSA) and according to the specific product formulation.

Packaging

- Standard Packing: 50 Kgs pp bag with inner liner or as per customer requirement.

- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.