

# Potassium Nitrate Fertilizer

Potassium nitrate for agricultural use

## Product Description

Potassium nitrate used as fertilizer in agriculture for potassium and nitrogen supply.

## Certificate of Analysis

HSN Code: 3104.30

CAS Number: 7757-79-1

Classification: Hazardous (oxidizing agent)

| Parameter                                | Specification                          | Test Method                        |
|------------------------------------------|----------------------------------------|------------------------------------|
| Potassium Nitrate (KNO3) content         | "e 99.0 % (technical) / "e 98.0 grade) | Gravimetric / Titration / IC       |
| Moisture (Loss on Drying)                | "d 0.2 %                               | Gravimetric (105 °C)               |
| Insoluble Matter                         | "d 0.05 %                              | Filtration / Gravimetric           |
| Chloride (Cl <sup>-</sup> )              | "d 0.01 %                              | Argentometric / Ion Chromatography |
| Sulfate (SO <sub>4</sub> <sup>2-</sup> ) | "d 0.10 %                              | Ion Chromatography                 |
| Nitrite (NO <sub>2</sub> <sup>-</sup> )  | "d 0.005 %                             | Ion Chromatography / Colorimetric  |
| pH (5% aqueous solution)                 | 6.0 – 8.0                              | pH meter                           |
| Appearance                               | White crystalline granules or powder   | Visual                             |
| Solubility                               | Completely soluble in water            | Visual / Literature                |

## Physical Properties

Appearance: White crystalline granules or fine crystalline powder

Odor: Odorless

Molecular Formula: KNO3

Molecular Weight: 101.10 g/mol

Solubility: Highly soluble in water ("H 316 g/L at 20 °C)

Density: 900–1100 kg/m³ (bulk density)

Packing: 25 kg / 50 kg multi-wall paper bags with polyethylene inner liner, 500–1000 kg jumbo bags

Storage: Store in cool, dry, well-ventilated area away from combustible materials and organic matter

## Safety & Handling

PPE: Gloves, goggles, dust mask

Hazards:

- Strong oxidizer - supports combustion
- Slightly hygroscopic