

TECHNICAL DATA SHEET

VOLTURE (N21 + S24)

Water-Soluble Nitrogen–Sulfur Fertilizer

Product Description

VOLTURE (N21+S24) is a premium, fully water-soluble fertilizer formulated to supply crops with an optimized ratio of Nitrogen (21%) and Sulfur (24%) for maximum nutrient efficiency. Designed for rapid uptake through foliar application, fertigation, or soil application, VOLTURE supports vigorous vegetative growth, enhanced protein synthesis, and improved chlorophyll formation.

It is particularly effective in sulfur-deficient soils and high-demand cropping systems.

Guaranteed Analysis

Nutrient	Content	Form
Total Nitrogen (N)	21% w/w	Ammonium / Nitrate blend
Sulfur (S)	24% w/w	Sulfate form

Physical & Chemical Properties

Parameter	Specification
Appearance	Crystalline powder
Solubility	≥99% water soluble
pH (1% solution)	5.0 – 6.5 (near neutral)
Chloride Content	Low (suitable for chloride-sensitive crops)

Mode of Action (Plant Nutrition)

- **Nitrogen (N):** Promotes vegetative growth, protein synthesis, and chlorophyll production, resulting in improved biomass and yield potential.

- **Sulfur (S):** Essential for amino acid formation, enzyme activation, and efficient nitrogen utilization, enhancing crop quality and stress tolerance.

The combined N–S formulation ensures **synergistic nutrient uptake**, preventing nitrogen losses and improving overall nutrient efficiency.

Target Crops

- **Field Crops:** Wheat, corn (maize), canola, oilseeds
- **Vegetables:** Brassicas (cabbage, broccoli), leafy vegetables
- **Fruits:** Citrus, grapes, berries (post-bloom to fruit development)
- **High-Value Horticultural Crops**

Key Features & Benefits

- **Balanced N–S Nutrition:** Optimized 21:24 ratio for efficient nutrient use
- **Rapid Uptake:** Sulfate sulfur is immediately plant-available
- **Enhanced Yield & Quality:** Improves protein content, greening, and crop vigor
- **Stress Mitigation:** Supports resistance to environmental stress
- **High Purity:** Minimal impurities reduce clogging in fertigation systems
- **Application Flexibility:** Suitable for foliar spray, fertigation, and soil application
- **Low Chloride:** Safe for sensitive crops

Recommended Application Rates

Application Guidelines

Method	Dosage	Frequency	Remarks
Foliar Spray	3–5 g/L water	Every 10–14 days	Apply early morning or late afternoon
Fertigation	20–30 kg/ha	Every 7–10 days	Fully compatible with drip systems
Soil Application	50–100 kg/ha	Pre-planting	Incorporate into root zone

Adjust dosage based on soil analysis, crop stage, and nutrient demand.

Composition Details

- Nitrogen Source: Ammonium sulfate (70%), ammonium nitrate (30%)

- Sulfur Source: Sulfate (100% plant-available)
- Additives: Anti-caking agent (<0.5%)

Compatibility

- ✓ Compatible with most NPK fertilizers and micronutrient chelates
- ✗ Not compatible with calcium-based fertilizers and strongly acidic solutions (pH <3.0)

Safety & Handling

Precautions

- Wear protective gloves and mask during handling
- Avoid inhalation of dust
- Do not mix with alkaline solutions (pH >8.0)

First Aid

- **Eye contact:** Rinse with clean water for at least 15 minutes
- **Ingestion:** Seek medical attention immediately

Storage & Shelf Life

- Store in a cool, dry place below 30°C
- Keep in original, tightly sealed packaging
- **Shelf life:** 24 months from date of manufacture