

Liquid Fertilizer

# NITRIFICATION INHIBITION SULFUR NUTRITION

THE ORIGINAL 12 - 0 - 0 - 26S

THIO-SUL, THE ORIGINAL AMMONIUM THIOSULFATE FERTILIZER SUPPLIES A HIGHER LEVEL OF SULFUR THAN ALL OTHER CLEAR LIQUID FERTILIZER ON THE MARKET.

SULFUR IS THE FOURTH MOST ESSENTIAL NUTRIENT FOR HEALTHY CROPS FOLLOWING NITROGEN, PHOSPHORUS AND POTASSIUM.

AS THE ORIGINATORS OF THE FIRST AMMONIUM THIOSULFATE FERTILIZER, CROP VITALITY HAS EXTENSIVE EXPERIENCE WITH THE PRODUCTION AND APPLICATION OF THIO-SUL.

DECADES OF TRIAL DATA AND CUSTOMER SUCCESSES HAVE MADE THIO-SUL THE MOST POPULAR SULFUR-CONTAINING LIQUID FERTILIZER USED TODAY.

# Thio-Sul delivers results

- Prevents nitrogen loss
- Reduces soil alkalinity & improves aeration
- Increases micronutrient availability & phosphorus uptake in high pH soils
- Combats Citrus Greening
- Aids straw decomposition



Learn How Thio-Sul works for nitrification inhibition, the economical and effective way to stabilize and maximize your nitrogen.

LEADING PRODUCER OF SULFUR-BASED PLANT NUTRITION



#### Plant Nutrient Content Weight %

Total Nitrogen (N) as Ammoniacal Nitrogen	12
Total Sulfur (S)	26

#### **Typical Properties**

Specific Gravity	1.33
рН	6.5 - 8.5
Appearance	Clear, Colorless to Yellow
Salt-Out Temperature	45ºF

# Formulation and Application Factors, 68°F

Density Pounds per gallon	11.1
Volume Gallons per ton	180
Pounds of Nitrogen Per gallon	1.3
Pounds of Sulfur Per gallon	2.8

## WHY THIO-SUL?

#### Thio-Sul as a Nitrogen Stabilizer

University research has shown that Thio-Sul acts as a nitrification inhibitor when blended with liquid urea and ammonium-based nitrogen fertilizers (including UAN solution). This slows the conversion of ammonium nitrogen to leachable nitrate nitrogen.

#### Thiosulfate as a Sulfur Source

Nitrogen and sulfur are important components of proteins. Sulfur deficiency affects the plant's ability to utilize nitrogen for protein synthesis. The advantage of thiosulfate is that it is a highly soluble source of sulfur and great for liquid blends. When applied to soils, Thio-Sul immediately begins to oxidize to sulfate-sulfur. Within 1 to 3 weeks, depending on soil temperature, soil type and rate of application, most of the thiosulfate sulfur converts to sulfate-sulfur, and in the process can increase the solubility of phosphorous and some micronutrients, including iron, zinc and manganese.

### Thio-Sul as an Acidifier

Since Thio-Sul contains both ammonium nitrogen and reduced sulfur, it generates more acidification than other nitrogen and liquid sulfur sources. As a dual nutrient source-acidifier, the use of Thio-Sul is a highly effective and economical practice for lowering soil pH.

#### Thio-Sul for Solubilizing Calcium Carbonate

In calcareous soils, Thio-Sul can be used to dissolve calcium carbonate to release calcium in soils containing 1% calcium carbonate or higher. The calcium is then available to help improve soil physical properties and to improve water infiltration and movement through the soil (important in helping to manage salinity/sodicity).

### Warranty and Limitation of Damages

Seller's guarantee shall be limited to the terms in the Application Guide, and subject thereto, the buyer assumes any risk to person or property arising out of use or handling and accepts the product on these conditions.

#### **Versatile Application**

May be used as a 2" x 2" starter, broadcast, early top-dress and through many types of irrigation systems.

#### **Optimal Compatibility**

Blends easily with other liquid fertilizers, including UAN and 10-34-0 or 11-37-0.



#### **Handling and Application**

SEE THE THIO-SUL APPLICATION GUIDE FOR HANDLING INSTRUCTIONS, CROP PRECAUTIONS, RATE RECOMMENDATIONS BY CROP AND TIMING OF APPLICATIONS. SEE THE SAFETY DATA SHEET (SDS) FOR SAFETY AND FIRST AID INFORMATION. SCAN TO LEARN MORE AND REVIEW THE APPLICATION GUIDE



START A CONVERSATION TODAY WITH YOUR CROP VITALITY SPECIALIST Call (800) 525-2803 | E-mail info@cropvitality.com | Visit CropVitality.com



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