


Thio-Sul[®]

12-0-0-26S

The Original
Ammonium Thiosulfate
Liquid Fertilizer
for the Addition of Needed
Sulfur in the Soil





Thio-Sul[®] brand
ammonium thiosulfate
(ATS) (12-0-0+26S)

economical

effective

convenient



Thio-Sul is the original ammonium thiosulfate plant nutrient solution instrumental in unlocking the full potential of your crops through the addition of sulfur, allowing your crop to achieve the maximum return per acre needed in today's agriculture.

Thio-Sul is a clear liquid solution that helps increase crop yields by satisfying the plants natural need for sulfur, and aids in maintaining necessary sulfur levels in soils. Thio-Sul not only supplies two essential plant nutrients, nitrogen and sulfur but also provides nitrogen stability when combined or applied with ammonium and urea N sources like UAN, urea solution and aqua ammonia.

Adding Thio-Sul to your UAN solution is the economical, effective and convenient way to stabilize and maximize nitrogen efficiency. Thio-Sul can reduce nitrogen loss by inhibiting or slowing down the nitrification process of converting ammonium (NH_4) to nitrate (NO_3). The ammonium form of nitrogen resists leaching by excessive rainfall and is available to the crop when needed. Thio-Sul gives you the added benefit of nitrogen protection while supplying crops with much needed sulfur, the fourth essential nutrient for better yields and greater crop quality, maximizing your net return per acre. Sulfur improves soil structure, increases water infiltration and aids in breaking down previous crop residues.

The Function of Nitrogen

- Essential for plant growth
- Synthesize amino acids, the building block of proteins
- Important for chlorophyll production
- Directly involved in photosynthesis
- Affects energy reactions in the plant
- Necessary component in all plant structures

The Function of Sulfur

- Increases plant production of more and higher quality protein
- Helps reduce the buildup of nitrates and non-protein nitrogen within the plant
- Improves photosynthesis by increasing chlorophyll content of plants
- Aids in the synthesis and function of enzymes and vitamins within the plant.
- Improves soil structure and increases water infiltration
- Aids in the decomposition of crop residue



Thio-Sul[®]

the original thiosulfate solution, Sulfur the fourth essential nutrient!

1. Improves plant nitrogen utilization through nitrogen stabilization of UAN solutions
2. Slows nitrogen losses in starters
3. Easy to store — Thio-Sul is a neutral to slightly basic solution with a low salt-out temperature
4. Safe and easy to handle — no bags to dispose of, no dust to contend with, and no hot water needed
5. Many uses — starters, broadcast, early top-dress and through the irrigation water
6. Excellent source of Sulfur — Thio-Sul provides thiosulfate sulfur which is readily available to plants and is a longer lasting sulfur
7. Compatible with most liquid fertilizers — easy to mix
8. All of the nitrogen in Thio-Sul is in the ammoniacal form
9. May be applied through all types of irrigation systems
10. Increases nitrogen efficiency when added to your side dress program
11. 50% of the sulfur contained in Thio-Sul is elemental sulfur and the balance is sulfate
12. Do not mix Thio-Sul with acid type products such as phosphoric acid.



better yields

**greater
crop quality**

**more net return
per acre**





Thio-Sul® TECHNICAL DATA

Total Nitrogen (N)	12%
(As Ammoniacal Nitrogen)	
Total Sulfur (S).....	26%
(Derived From: Ammonium Thiosulfate)	
Density pounds per gallon at 60°F	11.10
Gallons per ton.....	181.00
Salting out temperature °F	43°F to 45°F
Typical pH.....	7.2 - 8.00
Specific Gravity	1.325 lbs. per gallon
Lbs. N per Gallon	1.3
Lbs. S per Gallon	2.8
Ammonium thiosulfate (NH ₄) ₂ S ₂ O ₃	

HANDLING AND APPLICATION

See Thio-Sul Application Guide for handling and crop precautions; rate recommendations by crop and timing of application.

WARRANTY AND LIMITATION OF DAMAGES

Tessenderlo Kerley warrants only that this product conforms to the product description on the label. Tessenderlo Kerley makes no representation or warranty or guarantee, whether express or implied, of fitness for a particular purpose, of merchantability, or of product performance, works and ability. Tessenderlo Kerley does not authorize any agent or representative to make any such representation, warranty, or guarantee. Tessenderlo Kerley's maximum liability for breach of its warranty or for use of this product, regardless of the form of action, shall not exceed the purchase price of this product. Buyer and user acknowledge and assume all risks and disposal liability resulting from handling, storage, use and disposal of this product, whether in accordance with directions or not. If buyer does not agree with or accept these warranty and liability limitations, buyer may return the unopened container to the place of purchase for full refund.



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