



# Ammonium Thiosulfate

## 12-0-0, 26% Sulfur

### Guaranteed Analysis

Total Nitrogen (N) .....	12.00%
12% Ammoniacal Nitrogen	
Sulfur (S) .....	26.00%

Derived from  
Ammonium Thiosulfate CAS #7783-20-2

**Ammonium Thiosulfate** is an excellent source of ammoniacal nitrogen that is quickly absorbed by the plant. This results in greener turf, even at low soil temperatures. Use when a liquid type of ammoniacal nitrogen source and sulfur is required.

**Ammonium Thiosulfate** is a neutral to slightly basic (7.2 - 8 pH), clear liquid solution, containing 12% nitrogen and 26% sulfur. **Ammonium Thiosulfate** is compatible with most liquid fertilizer materials. Nitrogen and sulfur are important components of proteins. Sulfur deficiency can affect the plant's ability to utilize nitrogen for protein synthesis.

Thiosulfate sulfur is unique in that it exists in two oxidation states. This gives it enhanced pathways of availability more suitable to the sulfur uptake patterns of most plants. When applied to soils, **Ammonium Thiosulfate** decomposes to give approximately equal parts of sulfate sulfur ( $\text{SO}_4^{2-}$ ) and elemental sulfur ( $\text{S}^0$ ). The sulfate sulfur is immediately available for plant uptake, whereas the elemental sulfur  $\text{S}^0$  must undergo oxidation to a sulfate  $\text{SO}_4^{2-}$  before it can be absorbed by plants. Thiosulfate as a Sulfur Source. The advantage of Thiosulfate, in comparison to other sulfur forms, is that the sulfur need for plant growth becomes available over several weeks. When sulfur is applied totally in the sulfate form, some may be lost to leaching; the result of rainfall and/or irrigation water moving this form below the root zone. When elemental sulfur is applied, oxidation to a sulfate form must occur before it becomes available to the plant. Thiosulfate helps supply the plant's sulfur needs quicker and longer than other single forms of sulfur.

- Weight per gallon: 11.04 lbs. (5.0 kg)
- Enhances Manganese availability
- Each gallon contains:
  - 1.3 lbs. of Nitrogen
  - 2.8 lbs. of Sulfur
- pH: 7.2 - 8



**PLANT  
FOOD**  
COMPANY, INC.

The Liquid Fertilizer Experts

### Directions for Use:

**Greens, Tees and Fine Turf:** Apply 9 - 12 oz. of **Ammonium Thiosulfate** per 1,000 sq. ft. (3.1 - 4.1 gallons per Acre) every 14 days in a minimum of 2 gallons of water per 1,000 sq. ft. Irrigate after application.

**Fairways, Roughs, Sports Turf and Lawns:** Apply 3.1 - 4.1 gallons per Acre (9 - 12 oz. per 1,000 sq. ft.) of **Ammonium Thiosulfate** every 14 days during active growth period. Apply in a minimum of 87 gallons of water per Acre (minimum of 2 gallons of water per 1,000 sq. ft.).

**Fertigation:** Apply 1.0 - 5.0 gallons per Acre (3 - 15 oz. per 1,000 sq. ft.) of **Ammonium Thiosulfate** with the irrigation water. Repeat as needed every 7 - 14 days during active growth period.

**Application Precautions:** Do not apply **Ammonium Thiosulfate** directly on or below germinating seeds such as in a "pop up" fertilizer. Dry soil condition and/or combination with other starter fertilizers may damage germination. Always irrigate with sufficient water to reduce the possibility of fertilizer injury. Avoid application during mid day when temperatures are high.

### Application Rates for Ammonium Thiosulfate 12-0-0, 26% Sulfur

Fluid Oz/ 1,000 sq. ft.	Gallons/ One Acre	ML/ 1,000 sq. ft.	Nitrogen/ 1,000 sq. ft.	Sulfur/ 1,000 sq. ft.
3 oz	1.0 Gal	89 ML	0.03	0.0673
5 oz	1.7 Gal	148 ML	0.05	0.1121
9 oz	3.1 Gal	266 ML	0.09	0.2018
12 oz	4.1 Gal	355 ML	0.12	0.2691
24 oz	8.2 Gal	710 ML	0.25	0.5382

### Tank Mixing Information:

Prior to any fertilizer or pesticide application, all spray mixing and application equipment must be cleaned. A quality tank cleaner is recommended. Carefully observe all cleaning directions on the pesticide and fertilizer label. Fill the spray or mix tank at least 3/4 full of water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence:

- 1) Dry flowables or water dispersible granules, 2) Wettable powders, 3) Flowables,
- 4) Emulsifiable concentrates, 5) Water based solutions, 6) Compatibility agents,
- 7) Micronutrients and Fertilizers, 8) Spray adjuvants

Before mixing multiple chemicals and/or fertilizers in the tank, confirm product compatibility by performing a jar test. Be sure to mix with plenty of water.

### Caution:

Keep away from children and domestic animals. Avoid contact with eyes, open cuts, or sores. Harmful if swallowed. External: Flood with water. Internal: Induce vomiting. Contact a physician immediately.

**Ammonium Thiosulfate** should not be mixed with acids or other acidic materials below a pH of 6.

### Storage and Handling:

Store in a cool, dry place. Keep container tightly closed. Do not add water or other material to the container. Do not contaminate water, food, or feed by storage or disposal. Do not store near acids or other acidic materials.

### Available Container Sizes:

2 x 2.5 gal (2 x 9.46 L) Case  
30 gal (113.56 L) Drum  
55 gal (208.20 L) Drum  
275 gal (1040.99 L) Tote

Store above 32° F. Do not allow to freeze.

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