



Guaranteed Analysis

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

Derived from Ammonium Thiosulfate

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 are required.

Ammonium Thiosulfate is a neutral to slightly basic (7 - 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 (SO_4^{2-}) and elemental sulfur (S^0). The sulfate sulfur is immediately available for plant uptake, whereas the elemental sulfur S^0 must undergo oxidation to a sulfate SO_4^{2-} before it can be absorbed by the plant.

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 form of sulfur.

- Weight per gallon: 11.0 lbs. (5.0 kg)
- Enhances Manganese availability
- Each gallon contains:
 1.3 lb Nitrogen
 2.8 lb Sulfur
- pH: 7.0 - 8.0



Ammonium Thiosulfate 12-0-0, 26% Sulfur

Directions for Use:

Greens, Tees and Fine Turf: Apply 3.0 - 12.0 oz. of **Ammonium Thiosulfate** with 1.5 - 2 gallons of water per 1,000 sq. ft. (1.0 - 4.1 gallons of **Ammonium Thiosulfate** with 66 - 88 gallons of water per Acre) every 14 days throughout the growing season. Irrigate after application. This application shall provide 0.03 - 0.12 lb. of actual Nitrogen per 1,000 sq. ft.

Fairways, Roughs, Sports Turf and Lawns: Apply 3.1 - 4.1 gallons of **Ammonium Thiosulfate** with 44 - 88 gallons of water per Acre (9.0 - 12.0 oz. of **Ammonium Thiosulfate** with 1 - 2 gallons of water per 1,000 sq. ft.) every 14 days throughout the growing season. This application shall provide 0.09 - 0.12 lb. of actual nitrogen 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 every 7 to 14 throughout the growing season.

Application Precautions:

Do not apply **Ammonium Thiosulfate** directly on or below germinating seeds such as in a "pop up" fertilizer. Dry soil conditions 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.

Ammonium Thiosulfate should not be mixed with acids or other acidic materials below a pH of 4.

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

Fluid Oz/ 1,000 sq. ft.	Gallons/ One Acre	ML/ 100 M ²	L/HA Litre/ Hectare	Nitrogen/ 1,000 sq. ft.	Sulfur/ 1,000 sq. ft.
3.0	1.0	95	10	0.03	0.0673
5.0	1.7	159	16	0.05	0.1121
9.0	3.1	286	30	0.09	0.2018
12.0	4.1	382	40	0.12	0.2691
24.0	8.2	764	80	0.25	0.5382

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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