

# SULFUR (S)

*Sulfur (S) is essential to all crops for peak production. Plants use sulfur in the sulfate form ( $\text{SO}_4^- \text{S}$ ), which is very mobile in the soil and is prone to leaching in wet soil conditions, particularly in sandy soils. About 90% of the sulfur absorbed by plants is found in amino acids, which are the building blocks of proteins. Sulfur is also essential for chlorophyll formation. It has been shown to increase the synthesis of oils, especially in oil crops such as canola, soybeans or flax.*



## Sulfur Products

---





## Sulfur

AgroLiquid has three products that are used as primary sulfur sources and nine other products that provide plant available sulfur as part of their nutrient formulation. Among the most versatile sulfur products in the AgroLiquid lineup, eNhan<sup>ce</sup>™ can be used as a sulfur source or as a nitrogen performance enhancer. The products access<sup>™</sup> and S-Calate<sup>™</sup> provide sulfur and sulfur + calcium nutrition, respectively, but do not provide the same type of nitrogen performance improvement as does eNhan<sup>ce</sup>.

### How is eNhan<sup>ce</sup> used?

#### 1. Improving nitrogen performance in the crop:

When eNhan<sup>ce</sup> was first introduced, it was used as an additive with Urea Ammonium Nitrate (UAN) products to improve the performance of those nitrogen products. eNhan<sup>ce</sup> is a nutritional supplement that combines Flavonol Polymer Technology with micronutrients and enzymes to produce greater nitrogen utilization. By working within the plant, eNhan<sup>ce</sup> nutritionally fortifies the crop to use nitrogen more efficiently.

eNhan<sup>ce</sup> has also been shown to reduce ammonia volatilization in the storage tank and in the field, keeping more nitrogen in place and available to the crop. Unlike traditional nitrogen stabilizers that reduce the activity of various bacteria in the soil, eNhan<sup>ce</sup> protects the nitrogen in solution and does not adversely affect the soil biology. eNhan<sup>ce</sup> does not make UAN products “slow release” or “controlled release.” It keeps more nitrogen where it is placed and works with the plant to make it utilize nitrogen more efficiently.

#### 2. Sulfur source:

eNhan<sup>ce</sup> is a sulfur product with a small amount of nitrogen, manganese and zinc. Many years of testing and on-farm use has demonstrated that eNhan<sup>ce</sup> is a safe and effective source of sulfur nutrition that can be applied in-furrow to most row crops, small grains and canola. One gallon of eNhan<sup>ce</sup> can replace up to 12 lbs of sulfur from other sources. eNhan<sup>ce</sup> can be tank mixed with most AgroLiquid fertilizer products that are safe for in-furrow application. eNhan<sup>ce</sup> can also be used in a 2X2 placement at planting for sulfur nutrition.

eNhan<sup>ce</sup> is a safe and effective source of sulfur when applied as a foliar treatment. Most sulfur fertilizers on the market today will cause damage to foliage and should not be used as a foliar application. The ability of eNhan<sup>ce</sup> to be applied in-furrow, 2X2, and as a foliar treatment makes it one of the most versatile sulfur nutrition sources on the market.

S-Calate provides both sulfur and calcium nutrition. This product is usually recommended in lower pH and low calcium soils, or other conditions where there is a need for both sulfur and calcium. One gallon of S-Calate can replace up to 4.5 lbs of sulfur and 3 lbs of calcium from other sources. S-Calate can be applied in tank mix with nitrogen products and can be used in the same application timings and placements as access<sup>™</sup>.

## North Central Research Station Corn Yield bu/A

28% UAN 64 gal/A  
+ eNhan<sup>ce</sup>™ 2 gal/ton

**194 bu/A**

28% UAN 51 gal/A  
+ eNhan<sup>ce</sup>™ 2 gal/ton

**184 bu/A**

28% UAN 64 gal/A

**184 bu/A**