

# The Facts About Sulfate of Potash 0-0-50-17S

(Potassium Sulfate)

The **Sulfate of Potash** that is in our blends and that we sell as a straight material is extracted from Utah's Great Salt Lake, which is the safest and most effective form of Potassium. Activated by solar evaporation, the natural process removes crystallized nutrients from ponds fed by the lake. The **Sulfate of Potash** that results from this unique extraction process is low in salt content. It is approved as a source of potassium and sulfur by many organic grower organizations for use in organic production. This mineral is a dual nutrient, high in chloride-free  $K_2O$  and the sulfate form of Sulfur that helps growers achieve increased yields and higher quality crops.

## Potassium Produces Hardier Crops and Healthier Profits

Plants need large quantities of Potassium. The uptake of Potassium is frequently as high as or even higher than the uptake of nitrogen. It's difficult to overstate how critical adequate Potassium is to your crop. But a short list of its roles in plant growth and health says a lot.

- Crop quality
- Stimulates early growth
- Drought and frost tolerance
- Disease resistance
- Strength of cells
- Improves water-use efficiency
- Carbohydrate formation and storage
- Photosynthesis
- Transpiration

Under stressful conditions, such as drought, plants need even more Potassium. It has been shown that maintaining proper Potassium uptake in dry soil takes four times more Potassium than in wet soil.

Without enough Potassium, even crops receiving adequate amounts of nitrogen fertilizer can produce stunted plants, fruit that ripens unevenly, lower yields and poor quality.

## Sulfur is Often Overlooked but Always is Vital

Stunted, yellowing plants with delayed maturity might be suffering from a nitrogen deficiency, but these also are the symptoms of sulfur deficiency. If Sulfur is the problem, applying more

nitrogen fertilizer does not improve crop yield or quality. Sulfur is essential for a number of critical plant functions.

- Increases yield potential
- Stress and pest resistance
- Seed development
- Efficient use of nitrogen, calcium and phosphate
- Protein production
- Chlorophyll production
- Formation of fat and oil
- Carbohydrate formation
- Vitamin synthesis

There is an increasing awareness for the need of Sulfur as a plant nutrient due to increased use of “high analysis” fertilizers with little or no Sulfur; higher crop yields and demand, resulting in higher Sulfur removal; decreased use of Sulfur containing fungicides and insecticides; and environmental control of Sulfur emissions from industrial processes.

All crops need Sulfur, and **Sulfate of Potash** provides the Sulfur your crops need in the form most suitable for plant uptake.

### Potassium and Sulfur: How Much Do You Need?

Your crop is hungry for Potassium and Sulfur. The chart below offers a sampling of crops and the amount of Potassium and Sulfur required for strong yields.

Crop	Yield per Acre	K <sub>2</sub> O Uptake (lbs. per acre)	S Uptake (lbs. per acre)
Alfalfa	14 tons	840	70
Cabbage	700 cwt.	249	50
Clover-grass mixture	6 tons	360	30
Corn	220 bu.	290	36
Potatoes	900 cwt.	810	41
Sorghum	4 tons	240	38
Tomatoes	40 tons	463	54
Wheat	80 bu.	162	20