



ALLIED CUSTOM GYPSUM

# PRODUCT DATA SHEET

## SOIL SOLUTIONS

### GYPSUM 1/4" Minus Ag Fines

#### Description

The 1/4 inch minus Ag Fines are the most economical alternative for amending calcium deficient soils. It can be spread through broadcast methods at a fraction of the cost of gypsum pellets. Ag Fines are a natural gypsum mineral (calcium sulfate dihydrate) which is mined from an open pit quarry, crushed and processed into a fine granular product. This soil amendment is used to condition the soil, improve water and air penetration, address alkalinity problems, and enhance nutrient absorption.

#### Typical Chemical Analysis

Calcium Sulfate Dihydrate	88%
Calcium	20%
Sulfur	16%

#### Typical Physical Properties

Appearance	White to Buff
Specific Gravity	2.32
pH	7.5

#### Typical Particle Size Distribution

##### Particles Passing ASTM Sieves

ASTM 60 Mesh	> 30%
1/2" screen	100%

\*Certificate of Analysis and MSDS are available upon request

#### Benefits

Since Ag Fines are soluble, rain and irrigation water will dissolve the calcium sulfate and carry it into the permeability of the soil. The presence of this product in the soil matrix acts to improve the soil's physical properties by increasing the electrolyte concentration and providing calcium for an ion exchange reaction with sodium. Some of the benefits associated with the use of calcium sulfate are:

- **Improved Soil Structure** - Gypsum provides calcium which can flocculate clay soils and reduce the swelling of smectite and open pore spaces improving the penetration of water, air, and roots into the soil.
- **Increased Water Infiltration** - As the soil structure improves, the water infiltration rate and hydraulic conductivity of the soil increases.
- **Crust Prevention** - Using gypsum to increase the electrolyte concentration of the irrigation water can prevent depositional crusts on soil surfaces which can adversely affect water infiltration rates and seed emergence.
- **Better Moisture Retention** - Gypsum helps the soil take in and retain moisture, improving the soil's water-use efficiency which is especially critical in times of drought.
- **Fertilization**-Gypsum supplies bio-available calcium and sulfur, elements vital to proper plant growth and development.
- **Listed in OMRI (Organic Materials Review Institute).** This product may be used in organic farming.





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### Benefits *(cont.)*

- **Enhanced Nutrient Absorption** - The calcium supplied in gypsum is essential to the biochemical mechanisms by which most nutrients are absorbed. It regulates the balance of micronutrients in grass plants and optimizes the calcium to magnesium ratio in soils.
- **Environmentally Safe** - Gypsum is an inert and non-toxic mineral.
- **Irrigation Effect** – The success of an agricultural operation and the health of turf grasses are highly dependent on the condition of the soils. Controlling soil salinity with appropriate water management is especially important because soils with high sodium content detrimentally affect the physical and chemical properties of the soil resulting in lower permeability, poor tilth, and less water uptake by the plant. If soils are irrigated with excessive amounts of low quality water, the soil's sodium concentration will increase. The addition of calcium sulfate reverses these negative effects by reclaiming sodic soil and restoring it to a more productive condition.

### Transportation Logistics

Ag Fines are available in bulk form. As a service to our customers, Allied Custom Gypsum has the ability to provide full traffic and distribution services to coordinate logistical activities involving product delivery in accordance with customer requirements which include FOB and delivered price billing.

### Product Quality

We understand the importance of delivering Ag Fines with consistent quality. As a result, Allied Custom Gypsum is vertically integrated in order to be in complete control of all materials and processes responsible for the production of our products. We are able to analyze our gypsum products for purity, moisture, particle size, and overall quality.

### Customer Service

At Allied Custom Gypsum, we have had a long and successful tradition of service as a supplier of calcium sulfate to a diversity of industries, attesting to both our desire and ability to meet the needs of our customers. Our processing and grinding facilities offer easy access by either rail or truck. For special requirements, whether it's custom grinding, blending or shipping schedules, we stand ready to serve. Feel free to contact us for any unique needs. That's why we've put the word "Custom" in our name.