

# GreenSun® Manganese 5

For correction or prevention of sulphur deficiency in agricultural crops, vegetable crops, turf, and ornamentals



## GENERAL INFORMATION

GreenSun® Manganese 5 is a pastille-shaped micronutrient which is formulated using new and improved methods as compared to other conventional granular micronutrients. It is superior to other manganese materials in its handling and blending characteristics, contains very little dust, and has a very uniform granule size. GreenSun® Manganese 5, when used in conjunction with a balanced fertility program, can provide a season-long source of plant available manganese. GreenSun® Manganese 5 is recommended for all crops, and especially those with high manganese requirements (cotton, potatoes, onions, soybeans, and wheat) or those grown in sandy soils. Because of its high sulfur content, GreenSun® Manganese 5 will also improve soil sulfur levels as well as replenish sulfur loss associated with soluble plant nutrients.

## GUARANTEED ANALYSIS:

<b>Sulfur (S)</b> .....	<b>80.0%</b>
<b>Manganese</b> .....	<b>5.0%</b>

*Derived from: elemental sulfur and manganese oxide*

## Function of Sulfur (S) in Plants

Sulfur is an essential nutrient in crop production. It is classified as a secondary element, along with Mg and Ca, but it is sometimes called "the 4th major nutrient." Some crops can take up as much S as P. Sulfur has become more important as a limiting nutrient in crop production in recent years for several reasons. These include higher crop yields that require more S, less S impurities in modern fertilizers, less use of S-containing pesticides, reduced industrial S emissions to the atmosphere, and a greater awareness of S needs.

Sulfur serves many functions in plants. It is used in the formation of amino acids, proteins, and oils. It is necessary for chlorophyll formation, promotes nodulation in legumes, helps develop and activate certain enzymes and vitamins, and is a structural component of two of the 21 amino acids that form protein.

## Function of Manganese (Mn) in Plants

Manganese serves as a activator for enzymes in the plant growth processes. It assists iron in chlorophyll formation. Manganese is necessary in photosynthesis, N metabolism and to form other components required for plant metabolism. It is an essential component of some enzyme systems.

## General Application And Use Recommendations

GreenSun® Manganese 5 provides agronomic and economic benefits in an easy to use pastille form. It can be blended with other granular or prilled fertilizers or applied alone. Proper timing, rate, and placement is important for desired results and highly dependent on stage of crop growth, soil fertility levels, and environmental conditions. With surface applications, a light incorporation in the soil will assist in even distribution of the micronutrient particles. Applications rates vary from 5 to 25 lbs/ acre as determined by crop and soil test manganese levels.

## Handling And Storage

GreenSun® Manganese 5 should be stored and blended (if applicable) in a well-ventilated location to minimize accumulation of dust. Always use stringent dust control procedures to prevent a concentration of flammable dust from reaching a spark or flame source. GreenSun® Manganese 5 should not be blended or stored with strong oxidizing agents. Avoid the use of augers due to fracturing of the material. Avoid inhalation of dust if possible. Avoid contact with skin and eyes. Wear proper protective equipment when handling. Dispose of used bags in accordance with local, state, and federal regulations.



## Product Specs

<b>Density</b>	<b>82 lbs/ft3</b>
<b>Granule Size</b>	<b>SGN 260</b>
<b>Total elemental sulfur</b>	<b>0.80 lbs.</b>
<b>Total elemental manganese</b>	<b>0.05 lbs.</b>
<b>Angle of repose</b>	<b>29°</b>

**Package Sizes:** Available in 50 lb bags, 2204 lb super sacks, and bulk quantities

This bulletin provides some technical information and is not intended to give complete information for all applications.

Always read and follow label directions.



**FOR MORE INFORMATION, LABELS, MSDS and a COMPLETE PRODUCT LIST:**

- log onto [www.CoreAgri.com](http://www.CoreAgri.com)
- contact your sales representative
- or call: 1-800-385-4715

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