



MANGANESE

Micronutrient

Guaranteed Analysis

Sulfur (S)	2.50%
2.50% Combined Sulfur (S)	
Manganese (Mn)	5.00%
5.0% Water Soluble Manganese (Mn)	

Derived From:

Manganese Sulfate.

Also Contains Non-Plant Food Ingredient:

4.5% Organic Matter (derived from Leonardite)

Physical Properties:

Form: Liquid

Appearance: Clear, light yellow, having a characteristic odor.

Weight: 9.18 lb/gal, 1.10 kg/L

pH: 1.5–2.0

Caution:

Keep out of reach of children.

Harmful if swallowed. This product may be toxic by ingestion or inhalation of high mist concentrations.

The liquid and mists may cause irritation to the eyes, skin, and respiratory tract.

Storage and Disposal:

Keep product in original container. Do not transfer into food or drink containers. Triple rinse when empty for recycling. Always dispose of container in accordance with local, state, and/or federal regulations. Do not store this product below 50°F (10°C) or above 90°F (30°C).

Conditions of Sale:

The information contained in this bulletin is believed to be accurate and reliable. Buyer and user acknowledge and assume all liability resulting from the use of this material. Follow directions carefully. Timing, method of application, weather, turf conditions, and other factors are beyond the control of the seller.

The Solution for Improved Manganese Nutrition in Turf

Huma Gro® Turf MANGANESE carbon-complexed with Micro Carbon Technology® ensures efficient and effective uptake of manganese, which is a micronutrient involved in many turf metabolic activities including photosynthesis, enzyme activity, and nutrient regulation.

Benefits of Use:

- An enzyme activator that aids in chlorophyll synthesis
- Closely associated with the micronutrients copper and zinc
- Activates the lipid enzymes
- Essential for assimilation of carbon dioxide in photosynthesis
- Functions in the formation of riboflavin, ascorbic acid, and carotene
- Improves formation of lateral roots

Deficiency Symptoms—When to Apply:

- Chlorosis and/or mottling due to manganese deficiency
- Often deficient in sandy and/or high-pH soils
- In neutral to alkaline soils high in calcium and in organic soils where manganese is less available

Application Instructions:

Contents are highly concentrated and must be diluted with water in a ratio of at least 20 parts water to 1 part product prior to foliar application. See table below for specific rate instructions. Consult your local Huma Gro® Turf representative for turf-specific recommendations. SHAKE WELL BEFORE USING.

METHOD OF APPLICATION	Rate per 1,000 ft ² , 100 m ²	Rate per Acre, Hectare
Foliar broadcast spray or fertigated through sprinkler system	Up to 1 oz/1000 ft ² , 26 mL/100 m ²	Up to 1 qt/ac, 2.5 L/ha
Soil broadcast spray incorporated	Up to 2 oz/1000 ft ² , 53 mL/100 m ²	Up to 2 qt/ac, 5 L/ha



Powered by
**MICRO CARBON
TECHNOLOGY**

**This Product Contains Micro Carbon Technology®, a proprietary blend of very small organic molecules that allows for more effective absorption of nutrients by plants.*