The Science of Micro Carbon Technology™ for Delivery of Beneficial Soil and Turf Products

MCT Is The Catalyst For:
- Sustainable Soil Fertility
- Ultra Efficient Nutrition
- Optimal Hormone Management
- Zero Residue Protection

- Hexagonal ring – Carbon-rich nature of our technology based on the benzene ring.
- Brown drop – The benefits that the technology has on soil health, fertility and physical structure.
- Green drop – Tremendous benefits to turf that use the technology as a source of carbon and as a delivery vehicle for essential elements.
- Blue drop – Beneficial effects the technology has on cleaning up contaminated water systems.

Currently Seeking Dealers & Distributors

HUMA GRO® Turf invites you to experience the benefits of our broad spectrum line of Micro Carbon Technology™ turf products.
World's Most Efficient Product Delivery Technology

**FAST ACTING**

**MICRO CARBON TECHNOLOGY™ (MCT)**

The base of all of our products and the secret to our high efficiency rates is Micro Carbon Technology™. It is a proprietary blend of very small organic molecules that allow for more effective absorption of nutrients and other beneficial ingredients by plants. It is formulated from processed Leonardite and organic & mineral compounds. The symbol created for MCT is meant to serve as a graphical representation of the key aspects of what Micro Carbon Technology™ encompasses.

**ORIGINS OF OUR TECHNOLOGY**

The beginning of our proprietary Micro Carbon Technology™ can be traced back to 1973 when our scientists discovered a unique organic material found in a mine located in the Northwestern United States. When applied to farm fields, this material improved both the soil's fertility and the plants' nutrient uptake. We now know this material to be mainly composed of a very high quality Leonardite. Leonardite is a soft, brown, oxygen-rich form of coal that is made up of decomposing plant matter and minerals.

**UNIQUE PROPRIETARY PROCESS**

Over the years since the discovery of the Leonardite deposit, our scientists are continuously improving the time-tested process which refines our Leonardite into small carbon and oxygen-rich organic molecules. These molecules act as a rich source of carbon and act as an ultra-efficient vehicle to move essential elements into the plant either through the soil or the leaves. This ultra-efficient delivery system means that turf growers can achieve more with less! Our products have a positive environmental impact by promoting overall plant health through efficient foliar nutrition and the growth of roots and beneficial microorganisms in the soil. These benefits dramatically reduce the amount of chemicals and fertilizers needed to accomplish maximum results.

**KEY BENEFITS OF MICRO CARBON TECHNOLOGY**

- **Non-selective** – works with both positive and negative elemental ions.
- **Versatile Delivery** – sprayed or applied through all irrigation systems and/or as a spray by itself or mixed with other foliar agrochemicals.
- **Low Energy** – requires less effort to uptake nutrients and protects them from being tied up in the soil profile.

**EFFECTIVE RESULTS**

**Sustainable Soil Fertility**

Unlike Conventional Soil Fertility Products, MCT:

- Stimulates naturally occurring soil biology rather than innoculating
- Changes physical soil characteristics (flocculates clays) rapidly within 20-30 days
- Can stimulate up to 500 Kg / hectare (60 lbs/acre) of soil bio-mass in one application
- Releases tied up nutrients, increasing root availability in all soil types
- Buffers stress from soil toxicities (salts & heavy metals) and improves water penetration and holding capacity
- Increases root mass development naturally - up to 25%
- Requires fewer products to obtain maximum results

**Ultra Efficient Nutrition**

Unlike Conventional Nutrition Products, MCT:

- Lowers the volume of N-P-K applied per acre / hectare with higher efficiency, lower volumes and thus lower costs
- Complexes nutrients making them 2 to 4 times more efficient than standard chelated nutrients
- Are easy to use with lower handling costs
- Buffers nutrients so they are not phytotoxic to leaves and do not cause root burn
- Decreases N-P-K residues for reduced negative environmental impact
- Mixes well with most other nutrient solutions, PGR's and other chemicals and pesticides

**Optimal Hormone Management**

Unlike Conventional Hormone Management Products, MCT:

- Stimulates natural hormonal production within the plant for overall uniformity without long-term negative side effects
- Uses natural plant metabolic pathways where timing is not as critical for effectiveness
- Is less expensive to use and at the same time resolves many nutritional deficiencies
- Does not create environmental hazards and has zero public health concerns
- Manipulates the plant to do what we want it to do when we want it to do it
- Increases turf quality significantly

**Zero Residue Protection**

Unlike Conventional Protection Products, MCT:

- Contains no harmful chemical residues or contaminants that harm the environment or create concern for human health
- Results in long-term effectiveness where resistance cannot be accomplished due to the natural chemistries involved
- Requires minimal personal protective gear for application and zero re-entry requirements
- Can address and resolve the basic causes for plant pest infestation rather than just the symptoms

**INNOVATIVE SOLUTION**

**THE BASE OF ALL OUR PRODUCTS**

Using Micro Carbon Technology™ as a base, we have developed many highly efficient products for virtually every type of application. By building upon this base, the result is enhanced activity and reproduction of beneficial micro-organisms, improved soil physical structure, nutrient availability and uptake, and suppression of disease and pests. Our products efficiently give your turf the critical factors it needs for optimal growth.

**The Carbon Molecular Size Makes the Difference**

Our exclusive and innovative biotechnology enables us to create nutritionally rich products that are more environmentally friendly and easier to handle, as well as more flexible in their application.

**Seeing is Believing!**

For more information contact your local HUMA GRO® Turf distributor or representative or go to www.HumaGroTurf.com.