

MCT Is the catalyst for:

- Microorganism Diversity Stimulation
- Efficient Treatment Facilities
- Soil Bioremediation
- Efficient Lagoons & Ponds
- Economical Wastewater Treatment.

Our exclusive and innovative biotechnology enables us to create nutritionally rich products that are more environmentally friendly and easier to handle.



Micro Carbon Technology®

> Improve Wastewater System Efficiency and Microbial Health

HUMA Environmental Municipal

Industrial Food & Beverage Pulp & Paper

> Scan for more info

Huma®, Inc. 1331 W. Houston Ave., Gilbert, AZ USA 85233 **1.480.961.1220 Huma.us** © 2023 Huma, Inc. All Rights Reserved Pub. No. HE-230723-01



What is Micro Carbon Technology®?

Micro Carbon Technology[®] (MCT) is a proprietary blend of extremely small organic carbon- and oxygen-rich molecules that act as a source of carbon that greatly enhance existing microbial activity in wastewater. It is formulated from our exclusive company-owned, processed, and refined humic substances that are composed of organic- and mineral-rich compounds.

Where does MCT come from?

The origin of MCT can be traced back to 1973, when our scientists discovered a unique organic material that, when applied to farm fields, improved both the soil's fertility and the plants' nutrient uptake. We know this material to be composed of many organic acids similar to leonardite. Our product is a soft, humic material that is highly mineralized and rich in carbon, that was never compressed or heated to become coal. We break down the humic acids into small carbon molecules, concentrate them into a liquid, and use this as a base for all our products.

The base of all our products.

Using MCT as a base, we have developed many highly efficient products for maximum microbial stimulation in wastewater to reduce sludge; cut down on odor; lower biological oxygen demand (BOD), chemical oxygen demand (COD), and fat, oil, grease (FOG) levels; improve nitrogen removal; and lower electrical costs. Wastewater, in its untreated form, usually does not meet all the conditions for optimal microbial activity that leads to the breakdown of waste solids. When microbial activity is not optimized, sludge accumulates, odor gets out of control, and COD/BOD/FOG levels fall out of compliance with government regulations.

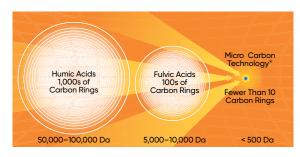


Key benefits of Micro Carbon Technology[®]? NON-SELECTIVE: works with both positive and negative

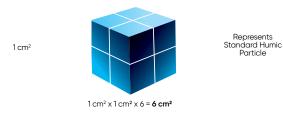
elemental ions.

VERSATILE DELIVERY: hand application, spray, or via simple pumping system.

LOW ENERGY: requires less effort from the microorganisms to uptake nutrients, lowering biological oxygen demand (BOD).



MCT produces organic material with greater specific surface area.





0.5 cm² x 0.5 cm² x 6 x 8 = **12 cm²**

0.25 cm²



0.25 cm² x 0.25 cm² x 6 x 64 = 24 cm²



TREATMENT PLANT EFFICIENCY

- Increase plant capacity
- More solids destruction
- Lower BOD/COD
- Better settleability/SVI
- Improved decant
- Less hauling costs
- Faster upset recovery

DIVERSE INDUSTRIES

- Food processing
- Municipal wastewater
- Pulp & paper
- Chemical refineries
- Animal waste
- Soil remediation

CLEANER LAGOONS & PONDS

- Reduce sludge build-up
- Eliminates fats, oil, & grease (FOG)
- Control offensive odors
- Lower BOD/COD
- Meet NPDES permit

ECONOMICAL WASTEWATER TREATMENT

- Reduce operating costs
- Less than 1/10th the cost of mechanical dredging
- Lower than 1/100th the cost of new facilities
- Reduce tipping fees & fines
- Reduce energy & costs

By using MCT, operators **can achieve more with less!** Our products have a **positive environmental impact** by promoting microbial development and species diversity. **These benefits dramatically improve wastewater treatment efficiency and effectiveness!**