



**BIO-ORGANIC CATALYST**  
THE POWER IN NATURE®

# ADVANCED BIO-CATALYTIC SOLUTIONS

## Optimize all aspects of solid waste management and waste-to-energy systems.

*Eliminate Noxious Odors • Accelerate Aerobic Biological Activity  
Ecological Animal Care Creates Higher Profits • Generate Higher Quality Compost and Bio-Solids  
Optimize the Production of Methane Yields*

### Breakthrough Bio-Catalyst Technology



#### ODOR

##### Odor Control Management

- ✓ Neutralize Odors on Contact
- ✓ Enhance Aerobic Biological Conditions
- ✓ Very Cost Effective

BOC based VOC odor management systems provide the world's highest performance standards in eliminating noxious odors and hazardous VOCs.

BOC based systems are the next generation green chemistry, both exceptionally safe to use and able to provide accelerated bio-remediation of the toxic biological conditions which produce odors.

##### Benefits Include:

- Extremely cost effective due to the ability to be delivered through water based spray systems at high dilution levels.
- Simple, flexible, and immediately effective upon contact.
- Neutralizes ammonia, hydrogen sulfide and hydrocarbon type noxious VOC compounds in solid waste, organic composting, and sludge treatment.



#### COMPOSTING

##### Optimizing Aerobic Systems

- ✓ Accelerate Composting Rates
- ✓ Improve Compost Quality
- ✓ Improve Cash Flows

BOC provides exceptional values to any composting operation. When sprayed onto a compost pile, it will instantly neutralize noxious odors. In addition to neutralizing odors on contact, aerobic conditions throughout the compost pile will be enhanced, leading to greatly improved composted materials, and faster conversion rates.

Atmospheric misting is also extremely effective, and provides much improved odor neutralization than any competing product, at a very competitive price.

Our unparalleled performance in odor neutralization, especially ammonia VOC, leading to greatly improved health to animals, reduction in death and sickness, and increased weight gains.

##### Benefits Include:

- Instant neutralization of odors on contact.
- Improved quality of compost.
- Higher turnover of compost.



#### ANAEROBIC DIGESTION

##### Optimizing Anaerobic Systems

- ✓ Increase Bio-Gas Yields
- ✓ Improve Bio-Solids' Quality
- ✓ Manage Food Waste & FOGs

BOC will facilitate a more optimized conversion of the waste stream during the anaerobic digestion process through solubilizing the waste components.

BOC offers substantial improvement in anaerobic digestion, 1) providing higher yields of bio-methane, 2) improved sludge quality, 3) reduction of total solids, and 4) significant reduction of noxious sludge odors.

Sludge quality is enhanced due to more complete digestion, sludge odors are greatly reduced, including odors in dewatering operations.

##### Benefits Include:

- Improves the destruction of Volatile Solids (VS).
- Facilitates the breakdown of fats, oils, and greases (FOGs).
- Enhances digester gas transfer enabling more efficient biological activity throughout the entire digester biomass.

## Neutralize VOCs • Accelerate Composting Rates • Optimize Anaerobic Digestion

Bio-Organic Catalyst has introduced the most advanced environmental technology for the waste energy and composting industries based upon its breakthrough bio-catalytic technology formulations.

This technical breakthrough is based upon a new understanding of how to utilize the inherent transformative powers that exist within nature, they unlock a two-fold cycle that can be applied to all organic wastes:

- 1) Molecular bonds of wastes are broken down along natural pathways through bio-catalysis, and
- 2) Instantaneous oxygen transfer neutralizes noxious odors and accelerates composting rates.

The key breakthrough of the BOC advanced bio-catalytic solutions model addresses the requirement for a highly safe (green) and powerful tool for solving a multitude of waste disposal challenges, including accelerating aerobic biological activity, and eliminating odors, in lagoons.

Odors are not only eliminated instantly upon contact, but the biological factors within organic wastes, which cause noxious odors to evolve, are restored to an aerobic (healthy) and fresh smelling state. Surfaces are cleaned so deeply and thoroughly that they are brought back to pristine condition.

Animal waste odors are substantially eliminated, providing better health conditions for enclosed animals, while reducing insect and fly populations, which are attracted by odors. Through innovative odor and waste control capabilities of this bio-catalytic technology, substantial economic values can be potentially realized in healthier animals, higher weights, and less mortality.

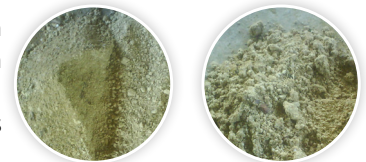
With EccoMate® and EcoSystem Plus®, and the advanced bio-catalytic capabilities they bring, the entire facility now is able to be converted into an optimized environmental system where wastes, animal health, and valuable organic end products, are synergistically linked together.

### Eccomate® & EcoSystem Plus®

EccoMate® and EcoSystem Plus® both contain a highly nutrient rich composition; with enhanced gas transfer characteristics, that are able to break down molecular bonds through the mechanism of 'beta-oxidation'. EccoMate® is specifically directed at odor neutralization and composting optimization, and EcoSystem Plus® is specifically directed at increasing bio-gas yields in anaerobic digestion.

EccoMate® and EcoSystem Plus® can be applied through spray systems, direct pump injection, power washers, or any type of wash down system, at dilutions depending upon the application being treated. EccoMate® and EcoSystem Plus® provide the professional operator the ability to manage their entire spectrum of wastes in the most environmentally safe and effective way. Organic waste is emerging as a valuable end product rather than only an environmental liability.

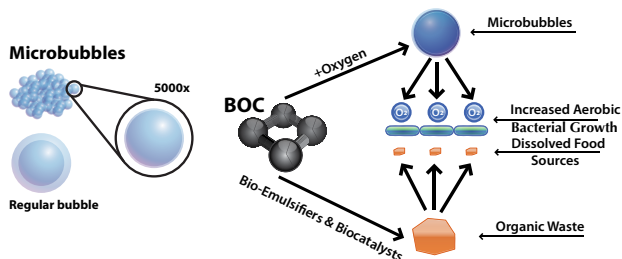
With EccoMate® Without EccoMate®



### Organic Waste Conversion

Bio-Catalytic Factors For  
Optimizing Biological Breakdown

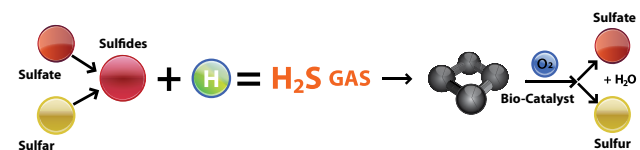
- Initiates an immediate catalytic breakdown of wastes,
- Eliminates the accumulation of biofilms and microscopic scum,
- Maintains drains and interceptors free flowing with no odors.



### Odor Elimination

Superior Odor Control

- Oxidizes noxious gases through oxygen transfer,
- Establishes more oxygenated and healthy aerobic biological conditions,
- Instantaneous odor neutralization on contact.



### Seal of Safety™

The Bio-Organic Seal of Safety™ is our trademark declaration of our commitment to offering green biocatalytic solutions that shift the treatment of our water resources to a more sustainable ecological model. ecological health of ecosystems.

All Bio-Organic Catalyst products are produced in the United State and must meet the highest standards of quality.

[bio-organic.com](http://bio-organic.com)