MicroClear® BioNite™

Odor Suppressant and Biological Organic Degradation

Product Bulletin

Environmental Leverage has Lab Analysis Service Available

MicroClear® BioNite™ is a proprietary formulation of ingredients containing a nitrate-based Electron Acceptor for Control of Odors. This product can be used for controlling odorous and potentially dangerous chemicals such as hydrogen sulfide, mercaptans, and volatile organic acids. MicroClear® BioNite™ helps eliminate the odor, corrosion and safety problems associated with hydrogen sulfide in sewage as well as prevent the formation of hydrogen sulfide.

MicroClear® BioNite™ a high potency, bacteria-laden, powdered formulation, for use in degrading many types of waste. MicroClear® BioNite™ contains a specially formulated, proprietary blend of microorganisms, micro/macronutrients, alternate oxygen source and surface tension suppressants/penetrants. Because of the diversity of the microorganism systems incorporated into this product it is specifically developed for use in situations where there is a particular high impact from odors as well as fats, oils and grease.

Our safe, naturally occurring bacteria are present in high numbers to handle difficult organic problems, suppress odors and are very economical to use. This product can be used in the treatment of liquid & solid organic waste.

MicroClear® BioNite™ contains facultative anaerobes, as well as an alternate oxygen source by providing an abundance of oxygen (electron acceptor) for metabolism to occur. This formulation bio-stimulant is non-hazardous and completely biodegradable. Safe, cost effective, easy-to-handle method of odor control with no hazardous byproducts.

Enzymatic Activity
Cellulase (CAU) .................................................. Units/Gram: 150 Min.
Protease (Casein Digesting) ................................. Units/Gram: 35,000 Min.
Amylase (Modified Wohlgemuth) .......................... Units/Gram: 55,000-80,000
Lipase (USP) .......................................................... Units/Gram: 400

Application Instructions for Sewer & Lift Stations

<table>
<thead>
<tr>
<th>Flow Rate</th>
<th>Initial Dosage</th>
<th>Maintenance**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 25,000gpd</td>
<td>1-3 lb. per week</td>
<td>1½ lb. per week</td>
</tr>
<tr>
<td>Up to 50,000gpd</td>
<td>2 lb. 2x week</td>
<td>2 lb. per week</td>
</tr>
<tr>
<td>Up to 100,000gpd</td>
<td>2 lb. every other day</td>
<td>2 lb. 2x week</td>
</tr>
<tr>
<td>Up to 250,000gpd</td>
<td>2 lb. per day</td>
<td>2 lb. 3x week</td>
</tr>
</tbody>
</table>

***The required dose ranges from 4 to 15 lbs. of calcium nitrate per pound of sulfide present.

Product Advantages
Eliminates malodors at their source
Contains Alternate Oxygen Source
Reduces Corrosion
Greatly reduces labor time
Enances BOD/COD removal
Reduces hydrogen sulfide
Reduces sludge buildup
Cost effective/Easy to use
Changes biomass dynamics
No special equipment needed
Increases system efficiency
Breaks down fat & grease buildup
Contains facultative aerobes
Degrades a wide range of complex organic compounds

Applications of Use
LIFT STATIONS
WET WELLS
SUMP PITS
SLUDGE TANKS
SEWER MAINS
GREASE TRAPS
LAGOON’S
TRICKLING FILTERS
DRAIN LINES
PONDS

Packaging of Product
MicroClear® BioNite™ comes in
1-lb. water soluble Bio-pouches.
Bulk packaging upon request.

MicroClear® BioNite is a proprietary formulation of ingredients containing a nitrate-based Electron Acceptor for Control of Odors. This product can be used for controlling odorous and potentially dangerous chemicals such as hydrogen sulfide, mercaptans, and volatile organic acids. MicroClear® BioNite™ helps eliminate the odor, corrosion and safety problems associated with hydrogen sulfide in sewage as well as prevent the formation of hydrogen sulfide.

MicroClear® BioNite™ a high potency, bacteria-laden, powdered formulation, for use in degrading many types of waste. MicroClear® BioNite™ contains a specially formulated, proprietary blend of microorganisms, micro/macronutrients, alternate oxygen source and surface tension suppressants/penetrants. Because of the diversity of the microorganism systems incorporated into this product it is specifically developed for use in situations where there is a particular high impact from odors as well as fats, oils and grease.

Our safe, naturally occurring bacteria are present in high numbers to handle difficult organic problems, suppress odors and are very economical to use. This product can be used in the treatment of liquid & solid organic waste.

MicroClear® BioNite™ contains facultative anaerobes, as well as an alternate oxygen source by providing an abundance of oxygen (electron acceptor) for metabolism to occur. This formulation bio-stimulant is non-hazardous and completely biodegradable. Safe, cost effective, easy-to-handle method of odor control with no hazardous byproducts.

Enzymatic Activity
Cellulase (CAU) .................................................. Units/Gram: 150 Min.
Protease (Casein Digesting) ................................. Units/Gram: 35,000 Min.
Amylase (Modified Wohlgemuth) .......................... Units/Gram: 55,000-80,000
Lipase (USP) .......................................................... Units/Gram: 400

Application Instructions for Sewer & Lift Stations

<table>
<thead>
<tr>
<th>Flow Rate</th>
<th>Initial Dosage</th>
<th>Maintenance**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 25,000gpd</td>
<td>1-3 lb. per week</td>
<td>1½ lb. per week</td>
</tr>
<tr>
<td>Up to 50,000gpd</td>
<td>2 lb. 2x week</td>
<td>2 lb. per week</td>
</tr>
<tr>
<td>Up to 100,000gpd</td>
<td>2 lb. every other day</td>
<td>2 lb. 2x week</td>
</tr>
<tr>
<td>Up to 250,000gpd</td>
<td>2 lb. per day</td>
<td>2 lb. 3x week</td>
</tr>
</tbody>
</table>

***The required dose ranges from 4 to 15 lbs. of calcium nitrate per pound of sulfide present.

Product Advantages
Eliminates malodors at their source
Contains Alternate Oxygen Source
Reduces Corrosion
Greatly reduces labor time
Enhances BOD/COD removal
Reduces hydrogen sulfide
Reduces sludge buildup
Cost effective/Easy to use
Changes biomass dynamics
No special equipment needed
Increases system efficiency
Breaks down fat & grease buildup
Contains facultative aerobes
Degrades a wide range of complex organic compounds

Applications of Use
LIFT STATIONS
WET WELLS
SUMP PITS
SLUDGE TANKS
SEWER MAINS
GREASE TRAPS
LAGOON’S
TRICKLING FILTERS
DRAIN LINES
PONDS

Packaging of Product
MicroClear® BioNite™ comes in
1-lb. water soluble Bio-pouches.
Bulk packaging upon request.
Typical Properties of Product
Appearance..........................light tan
Fragrance..........................mild-earthy
Form..................................powder
pH.....................................6.8-8.5
Shelf-Life............................1 year/u.o.c.
Flash Point........................none

Performance Properties
Effective pH range....................5.2 - 9.5
Effective Temperature Range.......35 - 130°F
Bacterial Enzyme Production.....Protease,
Lipase, Amylase, Urease, Cellulase

Storage & Handling
Storage..............................Store in a cool, dry place. Do Not Freeze
Container.............................Keep lid closed on Plastic Pail. Do not store water
soluble pouches out of plastic container.
Handling...........................Wash hands thoroughly with warm, soapy water

Bacterial Count
MicroClear® BioNite™..........................>1x10^9 (Billion per gram)