BiOWiSH™ Odor

BiOWiSH™ Odor Eliminates Odor Causing Molecules

Benefits

- Removes rather than masks odors
- Fast acting
- Effective on a wide range of volatile organic compounds (VOC)
- Cost effective
- Operative at low dosage rates
- Long residual effective period
- Natural and non-toxic
- Safe for humans and the environment

Delivery Methods

- Direct addition to an odor and emission source
- Spray application
- Water scrubbers
- Biofilters

Common Applications

- Landfills
- Composting sites
- Water Tteatment facilities
- Feed mills
- Industrial operations
- Animal production
- And more!

How BiOWiSH™ Odor Works

BiOWiSH™ Odor works rapidly to eliminate odors at their molecular source by bio-chemically altering the pathways of decomposition and accelerating the natural degradation process. BiOWiSH™ Odor uses a dual action process on odor causing molecules, degrading the substrates at the source and causing decomposition in their gaseous state. As the enzymes come into contact with the volatile organic compounds (VOCs), they react biochemically and break the VOCs down into their final, inert, odorless compounds.

Rapid decomposition and degradation processes take place due to BiOWiSH™ Odor's unique abilities to operate within an acidic environment and digest odor molecules in their dissolved, gaseous state.

Unlike most native bacteria which generally lose effectiveness at pH levels below 4.5, BiOWiSH™ Odor will operate in acidic conditions. This makes BiOWiSH™ Odor an ideal solution in applications where the natural process of decomposition has 'stalled' and acidosis has occurred.

Additionally, BiOWiSH™ Odor effectively digests the individual dissolved molecules of odorous compounds in gaseous states. This means no waiting for odorous air to disperse after eliminating odor at the substrate level.







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Additional Information

BiOWiSH™ Odor Can Operate Anaerobically

Unlike native bacteria which typically require oxygen to metabolize waste, BiOWiSH™ Odor is a facultative anaerobe. In other words, BiOWiSH™ Odor's enzymes can operate very effectively in the absence of oxygen. For example, a substance treated with BiOWiSH™ Odor will be treated throughout as the microbes rapidly disperse through the substrate rather than simply treating the surface.

Available Sizes:

- 100 g
- 1 kg
- 5 kg
- 10 kg

Case Studies and Relevant Data

At BiOWiSHTM, we test our products in a variety of environments and applications, using independent 3rd party researchers, universities, government institutions, and a variety of industry contacts to produce research studies and case studies.

Application	Country	Goal	Results
Landfill and Leachate Treatment	Barranquilla, Colombia	Increase cell compaction and lower leachate loading	BiOWiSH™ Odor achieved 7% cell compaction and reduced organic loading and suspended solids by 28-62% vs the control depending on the parameter (BOD, COD, TSS, and TN).
Wastewater Treatment	Alturas, CA USA	Reduce organic solids, sludge, and odor as well as save pump-out costs	Over a period of five months, the facility experienced an average of 87% reduction in total sludge volume in the digester. Within two weeks TSS decreased from 5734mg/L to 1356mg/L.
Garbage Disposal Plant	Thailand	Reduce odor to improve air quality	Sampling of the air was taken prior to BiOWiSH™ Odor treatment and 10 minutes after. BiOWiSH™ reduced Hydrogen Sulfide by 97.4%, Methyl Mercaptan by 94.0%, and VOCs by 74.5%.
Composting	McDonald's Corp. Office USA	Reduce complaints due to odor	With daily spraying of BiOWiSH™ Odor, potential odors were kept at bay and with zero complaints from employees and building occupants and expected decrease in cost from waste hauling.
Sewerage Station	China	Eliminate fugitive emissions to surrounding residential areas	BiOWiSH™ Odor was applied to both the solid and liquid streams in the plant. BiOWiSH™ decreased odor value in the liquid stream by 71.1% and in the solid stream by 69% within 40 min.



