

MiCroBial ODOR

Product Description

The core MiCroBial Odor is a natural biocatalyst made via unique fermentative process that has been continually refined by microbiologist in India. MiCroBial Odor consists of a selected consortium of bacteria, enzymes, nutrients and co-factors, it contain high concentration of enzymes and microbes.

MiCroBial Odor is a powerful combination of microbes/enzymes; it can control odor and emissions from any organic source. MiCroBial Odor is a completely natural product that accelerates the decomposition process of organic matter, resulting in cost effective and rapid removal (not masking) of organic gaseous molecules.

MiCroBial Odor breaks down odor causing and polluting molecules into their simple inert gases once in contact. MiCroBial Odor- Odor operates at a very high rate of catalysis resulting quick removal of the source of organic odors and pollutant molecules at a molecular level.

The by-products of MiCroBial Odor are inert odorless compounds such as H₂O, CO₂ and N₂. MiCroBial Odor is completely biodegradable and simply breaks down through natural decomposition.



Typical Application Area

- Municipal / Industrial Waste Water Treatment Plant (WWTP)
- Sewage Treatment Plant (STP), Composting Plant.
- Working Landfill, Composting windrows, Solid waste, Waste pond
- Drainage system, Nallah, Waste water canal, Oxidation pond etc
- Manure pond, Garbage transfer station, Restaurants kitchen
- Anaerobic Digester/Pond, Sludge pits

Physical Data

- **Colony Forming Unit (CFU):** Min 108 CFU/g
- **Product:** Dormant/Viable microbial culture and Dextrose powder
- **Product Form:** Dry free flowing powder
- **Color and Odor:** Off white powder with “mild sweet” odor and is dried and packaged
- **Optimum PH range:** Preferred range: 6 to 8

Key Benefits

- Reduce odor after application of product
- Increase composting speed
- Decrease composting time period
- Increase biogas production
- Reduce odor from leachate
- Fast acting
- Reduce volatile organic compound
- Reduces hydrogen sulfide, ammonia and nitrates
- Operate at low dosage rate
- 100% natural and non-toxic
- Reduce sludge production, COD, BOD, TSS, TKN & TP in WWTP

Performance

MiCroBial Odor is highly effective and fast acting at a molecular level. To get the full benefits of MiCroBial Odor, effective molecular contact between the MiCroBial Odor solution and the target substrate is essential. On most substrates the molecule is degraded immediately. Odors are typically reduced within minutes and due to accelerated decomposition of the substrate, residual performance times can be up to 30 days.

Incompatibility

MiCroBial Odor will not operate in the following conditions:

- In the presence of high levels of disinfectants
- High temperatures above 55 degree Celsius

Product Application -

RULE OF THUMB: Add 1 kg of product in to 1000 liter of fresh water (1000 ppm) and mix it properly for 30 mins, then it can be used to treat 200 - 300 tons of solid waste to control odor and 50 -100 tons of compost under optimum conditions. Product concentration will be decided based on odor intensity means high odor intensity high product concentration and low odor intensity low product concentration.

Direction for Use

MiCroBial Odor can be applied in many different ways to suit differing site requirements and existing capital equipment. MiCroBial Odor is supplied as a dry powder and must be mixed into water to activate the microbes. The most common methods of application for MiCroBial Odor are summarized below.

Spray-

MiCroBial Odor can be applied via a spray across any odor causing substrate or area.

Application Area - Solid waste, sludge, pits and sumps.

Directions for Use

- Mix MiCroBial Odor into water at 1,000ppm that means 1kg into 1,000L.
- Allow the solution to stand for 15-30 minutes.
- Spray across on solid waste to achieve coverage of up to 2,000 sq. ft. Or 200m²
- Re-apply weekly or as required.

Direct Addition

MiCroBial Odor can be added directly to any odor causing organic liquid substrate. It will rapidly work to break down the odorous molecules and will assist with the rate of decomposition of the substrate material.

Application Area - Waste ponds, manure ponds, storage ponds, waste water treatment, sewage treatment plant septic tank and other waste water treatment systems etc.

Directions for Use

- Mix MiCroBial Odor into water at 1,000 ppm that means 1 kg into 1,000L.
- Allow 15-30 minutes for activation, mix thoroughly.
- Spray 1,000L of solution into up to 200 - 300 T of waste.
- Re-apply monthly or as required.
- Preferably apply MiCroBial Odor as early in the waste stream as possible.

Misting Application

MiCroBial Odor can be applied via a high pressure low volume atomized mist into an odorous airstream or into a volume of air.

Application Area - Exhaust stacks, industrial waste, restaurant extractor exhausts, enclosed spaces, waste transfer and Garbage transfer stations.

Directions for Use

- Place MiCroBial Odor into fresh water and suspend in water reservoir at 1,000 ppm, 1 kg into 1,000L.
- Allow the solution to stand for 15-30 minutes.
- Apply solution at 5 ppm of air volume to be treated.
- Apply as required.
- Replace MiCroBial Odor in reservoir every 48 hours or as required to maintain dosage at 1,000 ppm.

Landfill Application

MiCroBial Odor can be used to control odor from landfill. Product can be added directly into fresh water and spread on the solid waste in landfill.

Application Area - Capped landfill, Open landfill, Garbage station, Garbage collection point.

Directions for Use

- Mix MiCroBial Odor into water at 1,000 ppm that means 1 kg into 1,000L.
- Allow 15-30 minutes for activation.
- Spray across on solid waste to achieve coverage of up to 2,000 sq. ft. or 200 - 300 tons of solid waste
- Re-apply weekly or as required.

Bio filter

MiCroBial Odor can be applied to bio filter media to improve its ability to remove odor and pollutants through the film of a beneficial microbial population.

Application Area - Bio filter.

Directions for Use

- Mix a quantity of MiCroBial Odor equivalent to 10% of the weight of the bio filter media.
- MiCroBial Odor can be spray applied to media by putting MiCroBial Odor into solution, allowing 30 minutes for activation and spraying to media.
- Ensure moisture content is continuously maintained at a minimum of 20%.
- If bio filter media is allowed to dry, re-apply MiCroBial Odor
- Re-apply MiCroBial Odor to bio filter media every 14 days or if bio filter is unused for more than 48 hours.

Composting Process

MiCroBial Odor can be applied to all composting process to accelerate degradation of solid waste.

Application Area – All composting process

Directions for Use

- Mix a quantity of MiCroBial Odor product in fresh water (quantity of fresh water will be taken as per requirement to maintain the moisture of composting process)
- Normally MiCroBial Odor should be applied at 5000 – 10,000 ppm concentrations means 1 kg should be added into 100– 200 liter of fresh water.
- Keep the mixture for 30 mins with constant stirring, after that spray the mixture on compost in such as way that MiCroBial bacteria and enzymes should reach to the source of odor and organic matter.
- Ensure moisture content is continuously maintained at its optimum.
- Re-apply MiCroBial Odor to composting process as per the requirement.

Technical Support

These instructions are applicable for most applications and substrates. For specific advice please contact technical department.

Available Sizes : 100 Gm. & 1 Kg.

Storage:

Product is delivered in sealed, moisture proof packaging. Product should be stored in a cool dry location, out of the sun and protected from insects.

Product shelf life:

1 year (minimum) under standard warehousing/office conditions.

For dosing concentration and application, please contact to technical team.

Please refer to the MiCroBial Technologies website for the appropriate MSDS, www.microbialtech.com