

Product Description

The core MiCroBial Aqua is a natural biocatalyst made via a novel fermentative process that has been continually refined by microbiologist in India. MiCroBial Aqua consists of a select consortium of bacteria, enzymes, nutrients and co-factors that degrade organic matter as Carbohydrate, Proteins & Fat (FOG). These microbes produce different types of enzymes as amylase, Protease, Lipase, Cellulase etc. MiCroBial Aqua works in aerobic and anaerobic conditions as it contents aerobic and facultative anaerobic microbes.



Typical Application Area

- Municipal / Industrial Waste Water Treatment Plant (WWTP)
- Sewage Treatment Plant (STP)/ Industrial Effluent Treatment Plant (ETP)
- Food/Beverage/Pharma/Dairy Effluent Treatment Plant (ETP)
- Drainage system, Nallah, Waste water canal, Oxidation pond etc
- Fruits and Vegetables Processing Industries
- Anaerobic Digester/Pond

Physical Data

- **Colony Forming Unit (CFU):** Min 109 CFU/g
- **Product:** Dormant/Viable microbial culture/Enzymes and micro-nutrients
- **Product Form:** Dry free flowing powder
- **Color and Odor:** light brown powder with a mild “yeasty” odor and is dried and packaged
- **Optimum PH range:** Preferred range: 6 to 8

Key Benefits

- Reduction in sludge production
- Reduce BOD, COD, TSS, Biological nutrients
- Improve MLSS, Biomass in the system
- Reduce odors
- Reduce aeration; Energy savings
- Reduce need for chemical additives
- Improves plant stability
- Reduce hydrogen sulfide, ammonia and nitrates
- Enhance nitrogen and phosphorus removal

Product concentration

Product concentration will be decided on the basis of strength of waste water/sewage. Before dosing MiCroBial Aqua product into system, It is recommended to analyse strength of waste water/sewage in terms of BOD, COD, TSS, PH, DO, TKN and TP, This will help to decide product concentration.

Once MiCroBial Aqua will be added into waste water/sewage, there will be microbial shifting in system which will replace bad bacteria by good bacteria. Once MiCroBial microbes established themselves, they will start giving results.

It is recommended to add source of nitrogen and phosphorus into the system if these micronutrients are not in sufficient concentration as these plays important role in microbial metabolism.

Direction for Use -

MIXING OF PRODUCT: MiCroBial Aqua should be mixed with fresh water.

RULE OF THUMB: 1 kg product can be mixed into 50 L plastic tank with fresh water or 100 gm bag mixed into a 20-10 L plastic drum with fresh water.

For best results, it is recommended to prehydrate product by adding fresh water and allows the solution to stand for 30 mins before adding to the inlet point of system.

Application in Sequential Batch Reactor/Activated Sludge Process/MBBR Technology (WWTP)

Apply the product concentration of 0.5-2 mg/L, depending on capacity of system. Concentration should be based on flow and volume of wastewater, sewage and pollution strength.

Application in Drainage, Nallah, Waste water Canal

Apply the product concentration of 0.5 to 1.0 mg/L, depending on existing environmental conditions. Drip feed for 24 hrs or at once depending on HRT of the system. Additional aeration will be recommended; dosing should be located to maximize mixing.

Application in Sewage Treatment Plant (STP) / Effluent Treatment Plant (ETP) / Anaerobic Digester-

Apply the product concentration of 1-3 mg/L, depending on the pollution strength of wastewater and capacity of tank.

Application in Oxidative, Decorative, Effluent Pond/Sludge Drying Bed/Livestock Manure Lagoons-

Apply the product concentration of 1-3 mg/L, depending on the pollution strength of pond water & volume of pond or lagoon. Additional aeration will be recommended; dosing should be located to maximize mixing.

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. Do not Freeze

Available Sizes : 100 Gm. & 1 Kg.

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