

Fat, Oil & Grease Treatment

MiCroBial FOG is a concentrated multi-strain blend of naturally occurring microbes, carefully selected to digest fats, oils and greases (FOG's) and other organic waste, typically associated with grease traps and waste water systems



The Problems -

In all environments, such as in hotels, schools, hospitals, restaurants, fast food chains etc, where there is food preparation undertaken, there is always regular quantities of solid food waste, which then find their way into the drainage system and as a result, the problems then begin to develop. Inevitably, these grease deposits often block grease traps and line waste pipes, leading to unpleasant odors and unhygienic conditions, which more often than not need chemical or mechanical treatment. This treatment has to-date, been the only solution available and these hazardous, toxic chemicals have compounded the damage to the environment.

The Product & Solution

MiCroBial FOG is a concentrated multi-strain blend of naturally occurring microbes, carefully selected to provide a broad range of effective operating conditions. The product contains bacterial strains to digest fats, oils and greases (FOGs) and other organic waste, typically associated with grease traps and waste water systems. The organic debris is utilized by the bacteria, so that the waste is effectively broken down at the source and not, just transferred downstream

Benefits of Regular Application

Superior Fat Digestion

FOG's are composed of triglycerides, which are broken down by bacteria in two stages. Firstly, the molecule is broken down into glycerol and free fatty acids by the enzyme lipase. Secondly, the free fatty acids are broken down into smaller molecules using specialist enzyme pathways. As a consequence, FOG levels are dramatically reduced due to the effective breakdown of triglycerides and resulting long and short chain fatty acids by carefully selected bacteria. MiCroBial FOG is more effective than detergent cleaners and leaves a biological film to maintain the 'cleared' state.

Improved Free-flow in Drain lines

The biological breakdown of FOG's is irreversible and as a consequence, trapped grease levels are reduced 'in-situ' and not transferred downstream, thus, reducing the incidence of maintenance problems and the need for grease trap pumping. The product removes the cost of expensive plumbing work.

Biological Solution to Save Environment

Effective Odor Reduction

The production of odors is reduced, due to the product bacteria inhibiting the production of hydrogen sulphide and from the effective breakdown of volatile fatty acids that may be produced in septic or anaerobic environments. Furthermore, MiCroBial FOG removes the off-putting smells in the kitchen area, reduces the risk of rodent and cockroach infestation and improves acceptance of kitchen inspections.

Complete Digestion of Solids

The secretion of high levels of amylase, Cellulase, lipase protease enzymes by the product bacteria, results in the effective

breakdown of all the organic components of waste associated with the drain environment.

Reduction in BOD levels which in Turn reduces sewage cost

The application of MiCroBial FOG will reduce the BOD's by as much as 80% and in doing so, will mean that the sewage costs are dramatically reduced.

Recommended Product - MiCroBial FOG Volume of Wastewater - 100 KLD **Quantity of Product** – 200 Gms/day Fresh Water Required - 20 - 25 liters

Dosing Point – Inlet Point of System or Oil Grease Tank

Product Application

200 gms of MiCroBial FOG will be mixed into 25-50 L plastic tank with fresh water, mix and stir it well for 30 mins so that product will get dissolved properly.

For best results, its best to prehydrate product by adding fresh water and allow the solution to stand for 30 mins before adding to the inlet point of system or Oil Grease Tank or Upstream point where maximum mixing of product can be done.

Product concentration will be decided on the basis of strength of waste water/sewage and quantity of waste water. Before dosing MiCroBial FOG 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 FOG 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. PH of Oil Grease tank should be between 6.5 – 7.5 and for proper mixing of product, manual stirring will be recommended.

Note – Its biological product and process so it will take some time to start degradation of FOG, so we recommend using this product for long period. Biological process is very slow process; it depends on optimum conditions for biological activity.

Storage and Shelf Life

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

