

EffuTreatTM
Bioculture

MTM
M.B.PL

MOTHEREARTH
BIOTECH PVT. LTD.

FAT OIL GREASE



Solid at room temperature

- Butter, Shortening, Margarine
- Peanut Butter
- Meat Trimmings
- Uncooked Poultry Skin
- Dairy: Cheeses, Milk, Cream, Sour Cream, Ice Cream



Liquid at room temperature

- Vegetable oil
- Canola oil
- Olive oil
- Corn oil
- Salad dressings
- Cooking oils



Turns to liquid during cooking but solidifies when cooled

- Gravy
- Mayonnaise
- Melted meat fat
- Bacon and sausage
- Boiled poultry skin
- Salad dressing

FAT OIL GAS

The presence of fat, oil, and grease (FOG) poses a significant challenge to wastewater treatment. FOG consists of emulsions or solids composed of glycerol esters, fatty acids, or triglycerides derived from animal or plant sources. Because FOG is insoluble in water, it floats and quickly converts into soap when exposed to an alkaline environment. This makes it one of the most difficult substances to remove from wastewater. The accumulation of FOG in sewer systems is a major problem, leading to sewer overflows that can have detrimental effects on the environment and public health. If left untreated, FOG can cause severe environmental consequences.

EffuTreat F.O.G

EffuTreat FOG is a unique product that consists of powerful microorganisms carefully chosen to accelerate the breakdown and decomposition of Fats, Oil, and Grease (FOG) obtained from food sources. These microorganisms have been specifically selected to efficiently liquefy and digest FOG found in grease traps collection systems and waste water treatment systems. The isolated strains of microbes are a meticulously formulated combination of high-performance microorganisms that are exceptionally effective in managing severe grease buildup in lift stations, sump pumps, wet wells, as well as large hotel and restaurant grease traps. EffuTreat FOG is a specialized solution developed for the treatment of biological waste water that contains a high concentration of grease, fats, and oils. It is formulated with surface tension depressants and has the ability to penetrate and effectively break down and liquefy stubborn grease deposits, thereby facilitating the process of biodegradation. The degradation of fat, oil, and grease is initiated by the extracellular enzymes produced by the microorganisms present in EffuTreat FOG. The microorganisms produce various lipolytic enzymes, such as genuine lipases and esterases, that are essential for breaking down complex molecules. Moreover, they also generate beneficial compounds like biosurfactants that assist in the biodegradation process. Once the FOG comes into contact with the biosurfactant, the EffuTreat FOG microorganisms efficiently consume the fatty acids and glycerol.



BENEFITS OF USING EffuTreat F.O.G

- Degrades Fat, Oil and grease from wastewater
- Reduces accumulation of organic matter on the surface of tank
- Breakdowns complex chain molecular structure of oil into simpler form
- Reduces foaming in biological tank
- Multiple strains of bacteria for effective result
- Reduces odor from plant
- Improves overall efficiency of the plant
- Effective under most of the environmental conditions
- Easy to store, handle and transport

AREAS OF APPLICATION

- Membrane Bio
- Reactor activated Sludge
- Process sequencing Batch
- Reactor moving Bed Bio
- Reactor extended Aeration
- System
- Oil and grease trap

PERFORMANCE PARAMETERS

- pH 6.5-7.5
- Temperature 5°C - 55°C
- Reactivation Rate 99% after addition to water
- Concentration Highly Concentrated
- Shelf Life 1 Years



PHYSICAL STATES AND THEIR FEATURES

- | | | |
|--------------------|---|------------------------------|
| • Physical States | LIQUID | POWDER |
| • Appearance | Tortilla brown | Swiss coffe brown |
| • Odor | Smell of media & micro organisms is present | Odorless |
| • Moisture Content | 100% | 15% - 17% |
| • Mesh Size | N/A | 0.4 mm – 0.8 mm |
| • Packaging | 50 ltr drum, 1 ltr bottle | 1 kg Aluminum Standing Pouch |

APPLICATION MATRIX

- Merge 1 kilogram of EffuTreat F.O.G with 1 kilogram of liquid jaggery, and subsequently add this combination to 100 liters of feed water. (2Kg in 200 Litres & so on...)

DOSAGE SCHEDULE

- The quantity needed daily is determined by the volume of wastewater and the organic load.
- However, the ratio between the amount of water to be used and the odor control solution also depends on the intensity of the odor at different places