



ESFR - FOG REDUCER

ESFR sewage and lagoon treatment is formulated for use in treating wastewater containing high levels of grease, fats and oil. **ESFR** loosens, liquefies and degrades heavy grease deposits. It is effective in degrading extra cellular polymers, which cause foaming, and suppressing the growth of the filamentous organisms by affecting the structure of the filaments.

Fat, oil and grease (FOG) can clog wastewater collection and treatment systems, septic tanks and holding tanks causing sewage spills, manhole overflows, property damage, environmental problems, and health hazards. Typically, animal and vegetable based oil and grease generated by restaurants and fast-food outlets that do not have adequate grease control measures in place, are the main contributors to these problems.

When fats, oil, or grease is washed into the plumbing system, through kitchen sinks and floor drains, it sticks to the inside of sewer pipes. Over time the FOG builds up and eventually blocks the entire pipe causing sewage backups and overflows.

Brown grease is floatable fat, oil, grease and settled solids recovered from grease control devices. Typically, brown grease is not reusable and is generally disposed of thru wastewater treatment facilities. Yellow grease is fat, oil, and grease that is not contaminated. Yellow grease is also referred to as recyclable FOG detergents, that claim to dissolve grease, simply move pass grease down the pipe and create a larger problem downstream.

BENEFITS OF ESFR:

- Reduces the accumulation of unsightly deposits of grease and fat
- Increases the efficiency of overloaded treatment systems
- Prevents blocking, ponding and possible collapse of filter-bed media
- Significantly reduces odour emissions
- Enhances BOD and COD removal while improving sludge settlement
- Controls filamentous growth
- Reduces foam
- Lowers sludge production

TYPICAL APPLICATIONS:

- Start-up of aerobic biological treatment systems handling wastewater from milk, processing, cheese-making and food processing
- Removal of grease deposits and prevention of scum formation in holding tanks, sewers, drains and aeration basins
- Acceleration of the biological degradation of wastewater containing high levels of fats, greases and oils

TYPICAL APPLICATION RATES FOR SEWER SYSTEMS:

Flow Rate	Initial Dosage	Maintenance
Up to 25,000 gpd	1 lb. / week	½ lb. / week
Up to 50,000 gpd	1 lb. / 2x week	1 lb. / week
Up to 100,000 gpd	1 lb. / every other day	1 lb. / 2x week
Up to 250,000 gpd	1 lb. / day	1 lb. / 3x week

TYPICAL APPLICATION RATES FOR TREATMENT PLANTS:

Flow Rate	Initial Dosage	Maintenance
Up to 250,000 gpd	15 lbs.	¼ lb./day
Up to 500,000 gpd	25 lbs.	½ lb./day
Up to 1 mgd	50 lbs.	1 lb. /day
Up to 5 mgd	50 lbs. / mgd	1lb./day per mgd
Up to 12 mgd	50 lbs. / mgd	¾ lb./day per mgd
Up to 100 mgd	50 lbs. / mgd	½ lb./day per mgd

** Add as regularly as possible. If it is required to miss one day, add that day's product with the next dosage. Dosage rate will vary with flow rates, retention times and system variations. The rates above are for a typical, well maintained system.

SPECIFICATIONS:

Form: Free-flowing granular powder

Color: Beige

Nutrient Content: Biological nutrients & stimulants

Plate Count: 5×10^9

pH: 6.5 – 7.5 (re-hydrated state)

Bulk Density: 0.6 - 0.8 gr/cc

Water Solubility: Moderate - disperses in water

Flash Point: N/A

Sensitive to static discharge: Not sensitive

Stability: Max loss 1 log/yr

SAFETY:

ESFR is produced in accordance with NOSB (National Organic Standards Board) guidelines. The materials used in the production process are derived from naturally occurring and sustainable sources and are consistent with organic principals and the National List of Allowed Substances. **ESFR** does NOT contain synthetic chemicals, animal components, and animal by products, manure or manure by-products. **ESFR** is environmentally safe and is not harmful to animals, plants and humans.

COMPLIANCE:

Fully complies with EPA Toxic Substance Control Act (TSCA) and the rules, orders and regulations promulgated there under including:

- a) Sections 4, 5, 6 & 7; Title 40 Chapter 1, 707.20 thru 707.75;
- b) 40 CFR Sections 704.3. 710.2(e) and 720.3(c); and
- c) Sections 5 and 13, reference 42FR64583
- d) Does not contain marine pollutants as defined in 49 CFR 171.8.

STORAGE & HANDLING:

Store in a cool dry location. Do not inhale dusts, avoid excessive skin contact. (See MSDS)

PACKAGING:

10 kg. (22 lb.) HDPE Pail - 250 gr. (8.8oz.) water soluble pouches

10 kg. (22 lb.) HDPE Pail - Bulk

110 lb. Fiber Drum - Bulk