

BFL 4000SU

One aspect of the start up of municipal wastewater treatment systems that is often overlooked is the heart of the system - the biomass. In many cases the biological commissioning of the plant must be completed in a relatively short time frame due to construction delays. In these circumstances it is important that the establishment of a healthy, efficient biomass can occur as quickly as possible.

The traditional approach to start up of municipal systems is to use sludge imported from another plant. However there are many drawbacks with this option including health and safety, acclimation, composition, transportation and cost. In many cases any problems which existed in the imported biomass will be amplified in the new plant.



Situations in which the use of BFL 4000SU are beneficial include:-

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| Plant start up | Re-seeding |
| Poor settlement | Poor BOD removal |
| Overloaded plants | Shock recovery |
| Sludge reduction | |

BioFuture harnesses the power of environmental biotechnology to quickly establish a biomass that can degrade the organic components of municipal effluent. BFL4000SU uses only harmless, natural micro-organisms that deal with the problem by degrading the

organic matter to CO₂ and H₂O in a highly effective and environmentally acceptable way.

What is BFL 4000SU?

BFL 4000SU consists of a carefully selected blend of natural micro-organisms that have the ability to efficiently degrade organic materials in municipal effluents. The wide range of strains have been specially chosen for their ability to produce the broad range of enzymes required to completely degrade the organic matter. These strains grow at a fast rate so that they can quickly establish dominance in the biological population. The product contains



strains that have the ability to produce good floc structure which will settle well and produce a clear final effluent. This helps to produce a biological sludge that has good settlement and dewatering characteristics. In re-seeding or shock recovery applications the strains in the product work in harmony with the existing biomass and increase its overall efficiency so that plant performance is restored as quickly as possible.

The type of systems in which BFL 4000SU can be used include:-

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| Activated sludge | Oxidation ditches |
| BAFF/SAF | Package treatment plants |
| Aerated lagoons | Membrane BioReactors |
| SBR's | RBC's |
| Trickling filters | |

The microbial strains are produced as single pure cultures, harvested, stabilised on a cereal base and blended together to produce the final product. Extensive checks are conducted throughout the process to ensure purity and quality of the product.

Directions for use

The product as supplied is on a cereal base so it is important that the bacteria are rehydrated before use. This is achieved by adding the required quantity of product to lukewarm (~30°C) water in a suitable container. Apply 1 part product to 10 parts water, stir well and allow to stand for 1 hour before application. Apply the rehydrated product immediately prior to the aerated section of the treatment plant e.g. into a drain, pump sump or return sludge line.

Since each application is different and has different characteristics it is important to assess the site before deciding on a dosing programme. The Technical Department provides assistance in assessing the site and devising a treatment programme.

Product safety

The micro-organisms in BFL 4000SU have all been isolated from natural environments. They have not been genetically modified in any way. These microbial strains have been classified as being harmless to humans, animals and plants in accordance with EU and WHO guidelines. The product is subjected to independent testing to ensure that it is free of *Salmonella* and other contaminants.

For further information on dosing programmes and product application please contact :-

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