

BFL 5600SS

Surfactants in wastewater streams cause major problems when they enter treatment plants. Under the influence of aeration they produce massive amounts of foam which can be unsightly and causes problems with oxygen transfer. This has a detrimental effect on the performance of the treatment plant and can cause unsightly scum to carry across to secondary clarifiers and coat all surfaces. When surfactants enter watercourses such as streams or lakes they cause problems with oxygen transfer to aquatic life such as fish by coating their gills. This results in fish kills.

Surfactants consist of a wide range of different compounds with differing characteristics, including soaps, wetting agents, emulsifiers, detergents, etc. Since they are not part of the natural environment it is difficult for the bacteria in treatment systems to biodegrade them effectively.



Applications in which the use of BFL 5600SS are beneficial include:-

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

BioFuture harnesses the power of environmental biotechnology to solve the problem by degrading the surfactants so that they quickly lose their foaming properties and thus the detrimental effect is eliminated.

BFL 5600SS uses only harmless, natural micro-organisms that deal with the problem by degrading the surfactants to CO₂ and H₂O in an environmentally acceptable way.

What is BFL 5600SS?

BFL 5600SS consists of a carefully selected blend of natural micro-organisms that have the ability to degrade all the main classes of compounds in surfactants. The various types of surfactants are anionic, cationic, non-ionic and amphoteric. The product contains a broad range of different microbes

that can produce the enzymes required to completely degrade these diverse compounds. Once the degradation process has started the ability of the



surfactant molecules to produce foam is quickly eliminated and the microbes continue the process until the compound is

completely degraded. The product formulation also contains microbial strains which have the special ability to produce good floc which will settle well in the secondary clarifier and produce a clarified effluent low in suspended solids.

The types of systems in which BFL 5600SS can be used include:-

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| Activated sludge | Oxidation ditches |
| SAF | MBBR/IFAS |
| Aerated lagoons | Membrane BioReactors |
| Sequencing Batch Reactors | |

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.

BFL 5600SS can be used to deal with environmental problems caused by soaps, detergents and many foam related issues.

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 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.

Product safety

The micro-organisms in BFL 5600SS 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

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