

BFL 5200VP

The effluent from plant processing industries contains large quantities of organic materials such as starch, cellulose, hemicellulose, sugars, vegetable protein, etc. In many instances processing is operated on a seasonal basis dependent on the harvesting of the crops. Industries which are associated with plant processing include: -

- Vegetable canning/freezing**
- Fruit canning/juice extraction**
- Wine production**
- Sugar production**
- Brewing**
- Fermentation**

While the degradation of residual sugars and vegetable protein are relatively easy, the degradation of starches, cellulose and hemicellulose



are more difficult. This can result in poor effluent quality.

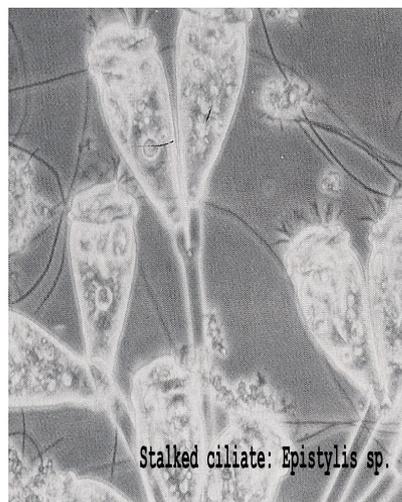
Situations in which the use of BFL 5200VP is beneficial include: -

- | | |
|--------------------------|------------------------------------|
| Plant start up | Re-seeding |
| Poor settlement | Poor final effluent quality |
| Overloaded plants | Shock recovery |
| Bulking sludge | Odour control |

BioFuture harnesses the power of environmental biotechnology to solve the problems by degrading the starch, proteins, sugars, cellulose and hemicellulose in a highly efficient way. BFL 5200VP uses only harmless, natural micro-organisms that control the problem by degrading the organic matter to CO₂ and H₂O in a highly effective and environmentally acceptable way.

What is BFL 5200VP?

BFL 5200VP consists of a carefully selected blend of natural micro-organisms that have the ability to efficiently degrade starch, proteins, sugars, cellulose, hemicellulose and other organic materials in the effluents from these plant processing industries. 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 biomass, which is



the heart of the wastewater treatment system. The product contains strains which have the ability to produce good floc structure which will settle well and produce a clear final effluent.

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 product blend contains facultative strains, which can work effectively in lagoon systems where oxygen is limited.

The types of systems in which BFL 5200VP can be used include: -

Activated sludge	Oxidation ditches
Biotowers	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.

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 BioFuture Technical Department provides assistance in assessing the site and devising a treatment programme.

Product safety

The micro-organisms in BFL 5200VP 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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