

innovative turf solutions

BIOFLOC™ **BIOLOGICALS** **GENERAL INFORMATION**

The product consists of three microbial mixtures of non-pathogenic, naturally occurring bacteria in stable spore concentrates with an additional two mixtures of Bacillus and Pseudomonas bacteria. BIOFLOC™ is available in either dry or liquid form.

BIOFLOC™ bacterial cultures can be supplied in a variety of concentrations to provide the user with the greatest possible economy, flexibility and end use effectiveness. Our standard concentrated bacterial cultures contain ten to 100 times more bacteria than is generally available and offer significant savings and greatly reduced shipping costs when compared to other products.

BIOFLOC™ bacterial products are used to effectively treat municipal and industrial wastewaters and other wastes including surfactants, petrochemicals, hydrocarbons, fats, oil and greases (FOG), BOD5 and sludges. The successful degradation of these wastes is through bacterial activity and the production of enzymes including proteases, lipases, amylases, ureases, cellulases, and/or reductases. Our bacterial products are used in high strength organic and solids loading situations including manure lagoons and composting operations to control odor and for BOD5 reduction and sludge reduction. BIOFLOC™ bacteria are used to treat a broad spectrum of waste and wastewater challenges.

Typical conventional fertilizers contain zinc, calcium, iron, phosphorous and nitrogen which are considered contaminants monitored and limited by the EPA for groundwater as well as surface water runoff. Part 1 of the BioFloc™ product, FLOC™, can remove and contain these contaminants by the flocculation process. Part 2 of the BioFloc™ product, the biologicals, will digest the zinc, iron, phosphorous and calcium through an aerobic process and turns the nitrogen into oxygen, nitrogen gasses and ammonia gasses creating a bacteria friendly environment for enhanced BOD reduction and ammonia conversion enabling the ammonia and nitrogen to dissipate into the atmosphere; therefore, the time involved in solids degradation is greatly reduced. This process is even improved further by the addition of more microbes. The bacteria require oxygen to degrade the waste. In the traditional pond methods (anaerobic), the bacteria steal the oxygen from the sulfates and nitrates. This leaves behind sulfide gases (responsible for crop burn). Using the BioFloc™ (aerobic) method, this will decrease the chance of surface water runoff contamination due to BOD, nitrogen compounds and other constituents that the EPA regularly monitors.