



Technical Data Sheet

Revised: 10/07

AmmoniaFix Nitrifying Bacteria

Product Make-Up: Nitrosomonas, Nitrobacter Bacteria

Package: 16 oz., 32 oz., 64 oz., & 1 Gallon

Treats: 32 oz. Treats 8,000 Gallons

Toxic: Non-Toxic When Used As Directed

Warnings: Keep Out Of Reach Of Children, Not For Human Consumption, Store At Room Temp.

Shelf Life: 2 Years

MSDS Sheet: Available Upon Request

AmmoniaFix Nitrifying Bacteria

CrystalClear® AmmoniaFix is also an all-natural bacteria and enzyme based product specifically designed to polish water by completing the nitrification cycle (See Chart, Next Page). CrystalClear® AmmoniaFix contains special strains of bacteria that will safely convert ammonia to nitrite and nitrite to nitrate via a process known as nitrification. Once this process is complete toxic ammonia has been converted to harmless nitrate which can be utilized by aquatic plants as a nutrient source. CrystalClear® AmmoniaFix will remove some nitrate on an anaerobic level but most of the remaining nitrate will be used by aquatic plants.

Ammonia is extremely toxic in its un-ionized form and non-toxic in its ionized form. This can be controlled by keeping pond water at low pH levels. At low pH levels ammonia will ionize and at levels higher than 7.2 ammonia begins to un-ionize and becomes more and more toxic. Ammonia at high levels will burn the surface of fish scales and gills thereby stressing the fish to the point of death. This dilemma can be diverted by simply applying a good nitrifying bacteria such as CrystalClear® AmmoniaFix.

Biologically, nitrogen compounds may be stripped of their oxygen and other compounds by certain types of bacteria which are found in CrystalClear® AmmoniaFix. These bacteria, when they are restricted from access to oxygen, utilize nitrogen compounds instead of oxygen for respiratory purposes and biochemically pull away the oxygen component of the nitrogen ion. The net result of this process (denitrification) is nitrogen gas which is a bi-product of this cycle, thus completing the nitrification cycle. Once the nitrification cycle is complete the net result should be little to no ammonia, nitrite or nitrate levels and a significant clearing of water.

Nitrifying bacteria will readily colonize on the bottom of the pond and especially on the filter. As the water flows over the filter the bacteria will begin to work and pull nutrients from the water so we suggest (as with the other bacteria products) applying the products directly into the filter in order for the best and most effective results to be achieved.

CrystalClear® AmmoniaFix is designed to perform the same functions that the naturally occurring bacteria cannot perform. Most naturally occurring bacteria cannot keep up with the constant load of organics and algae entering the pond. Therefore, it is necessary to inoculate ponds with bacteria and enzyme supplements such as CrystalClear® AmmoniaFix to ensure a clear, healthy system. CrystalClear® AmmoniaFix is 100% safe for fish and plants and performs very well at seeding filters as well as the entire pond.

As with any living creature bacteria need certain environmental parameters to survive. Therefore, it is necessary to have the following characteristics present in a pond before treatment to ensure the proper function of this product:

Best Used When:

pH OF WATER MAINTAINED BETWEEN 6.5 AND 9.0.

WATER TEMPERATURE ABOVE 60°F (15°C).

DISSOLVED OXYGEN LEVELS ABOVE 3 PPM (3 MG/L).