

# NoPhos

Without phosphates algae  
and bacteria can't grow



## What is NoPhos?

Unicellular algae and bacteria need phosphates to transport nutrients across their cell membranes. In the absence of phosphates they cannot metabolise any nutrients that are present in the water.

NoPhos removes phosphates that enter the system from make-up water supply, from animal feed and from wind blown debris. Phosphates are fertilisers and if controlled, algal and bacterial growth can be managed. If phosphates are removed they will starve and algae/bacteria are eliminated over a period of about six weeks.

NoPhos is a natural product that can be safely used in living systems. It is widely used in aquaria and mammal systems around the world including use for management of phosphates in living coral culture. Dryden Aqua's knowledge as marine biologists ensures the purity and consistency of chemical content that determines its suitability for aquarium use.

NoPhos uses Lanthanum, a charged ion which reacts with phosphate to form an insoluble precipitate that is removed by AFM<sup>®</sup>, or it forms an inert deposit on the bottom of the pool that is easily removed.



## Your benefits at a glance:



### NoPhos:

✓ **Eliminates phosphates**

Prevents algae and bacterial growth

✓ **Is a natural product**

Can be used in marine mammal LSS as well as in fish and invertebrate systems.  
Non-toxic and guaranteed pure!

✓ **Is a coagulant-**

It improves the filtration performance of both AFM<sup>®</sup> and sand filters.

# Prevention is always better than cure!

## Phosphate target levels & analyses

- In mammal LSS the objective should be total elimination of phosphates.
- In biological systems phosphate levels should be controlled to between 0.05 and 0.1mg/l.

Phosphates can be analysed using a simple spectrophotometer with appropriate reagents.

Analyses will measure only phosphates in solution and not those bound up in organic matter. The actual level of phosphates will therefore always be greater than measured levels and continuous low level dosage will normally be needed.

## How to use NoPhos?

Only a small amount of NoPhos is required to remove phosphates. 10 fl.oz. of NoPhos is enough to bind 1 oz of phosphates. In a system with 30,000 gal of water at 0.5 ppm = mg/l = g/m<sup>3</sup> of phosphates, there are 2 oz of phosphates in the system. To remove the 2 oz of phosphates you need 20 fl.oz. of NoPhos.

In animal systems, NoPhos should be automatically and continuously added to the pool using a peristaltic dosing pump. 1 liq.qt. of NoPhos can be diluted to 5 gal using clean water. This solution is then continuously dosed into a ZPM before the filter at 1 fl.oz. per 15,000 gal of water circulated. Example: 3,000 gal/hr circulation = 0.2 fl.oz. of diluted NoPhos. Depending on the analyses, dosage rates can be adjusted up or down.

It is not possible to overdose in a non-biological system whereas overdosing in a biologically filtered LSS can starve the bacteria in the biofilter. Some phosphates should always be left in solution to help maintain the biofilter performance. Monitoring of the phosphate concentration is therefore important. NoPhos reduces bacterial and algal growth but is neither a disinfectant nor an algicide.



In external biologically filtered systems that are exposed to UV light, NoPhos should be used in conjunction with ACObio. This will raise the RedOx potential and improve water clarity. Both products will work even with poor or no filtration.

In natural lakes, reservoirs and ponds, dramatic improvements can be seen with ACObio, even without filtration.

Standard ACO and NoPhos should always be used in all outdoor chlorinated systems.

## Who is Dryden Aqua?

We are a Scottish marine biological company founded in 1980 primarily to serve the aquaculture industry and AFM was developed specifically for aquaculture and aquarium use. Our unique knowledge combination and detailed understanding of biological as well as physio-chemical reactions has since enabled us to develop into other markets where sustainable water treatment processes can make a difference.

Our passion however remains in the aquaculture and aquarium industries which provided the foundation for our commitment to conservation and sustainable technology. Our mission is to help make the world a better place by providing solutions that save lives in developing countries, improve overall public health around the world and have a positive environmental impact on our ecosystem.

