Chemical Filter Media Selection Guide

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intermediate

improve water quality with

s your aquarium pollutant-free?

It is an unfortunate fact that a variety of harmful chemicals find their way into most home aquariums. Some pollutants, like copper, are even present in certain fish medications. Others, such as chlorine and heavy metals, are found in tap and well water. Still other pollutants, like ammonia, are byproducts of fish waste, uneaten food, or essential biological filtration.

Chemical filtration is the simplest way to remove these potentially dangerous pollutants from fresh and saltwater systems. There are a variety of chemical filter media available. Most chemical media remove specific pollutants from the water column while others are combined to create multi-functional chemical filter media that simplify removal of multiple pollutants. Find out which chemical media type best suits your aquarium's filtration needs for improved water quality.

Activated Carbon

Carbon is by far the most popular form of chemical filter media. It boasts a myriad of microscopic pores that bind with and remove dissolved particles from your aquarium's water. Activated carbon helps remove a variety of pollutants including copper, chlorine, dissolved proteins, medications, and other organic and inorganic compounds. It also removes odors and discoloration to create crystal clear aquarium water. Since carbon loses its effectiveness as its pores fill, be sure to replace it frequently for optimal chemical filtration.

Zeolite

Zeolite is a mineral-based media with porous composition. It differs from other chemical filter media in that it specifically absorbs and removes ammonia and other nitrogenous compounds from freshwater aquariums. As an added benefit, many forms of zeolite can rapidly reduce large concentrations of ammonia from the water column. Some forms can also be soaked in saltwater to recharge their absorptive abilities for reuse within your aquarium filter. It is available in both natural and synthetic forms. While primarily used for freshwater applications, special zeolite media is also available for marine aquariums.

Phosphate Removers

This form of chemical filter media is also highly porous and super absorbent. It effectively binds large concentrations of phosphate, dissolved organic compounds, heavy metals, and other pollutants. High phosphate levels reduce water clarity and feed undesirable organisms, such as nuisance algae. In saltwater aquariums, phosphate can precipitate dissolved calcium and magnesium, vital for healthy coral growth. Many phosphate removers are formulated for

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Why should I use chemical filtration? Isn't biological and mechanical filtration enough?

A: Chemical filtration removes toxins that biological and mechanical filtration do not. Chemical filter media work at the chemical level to remove toxins that readily pass through your biological and mechanical filters. Chemical

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long-lasting control and have high saturation points to help prevent absorbed pollutants from leaching back into your aquarium's water. Though many forms of phosphate removers are available, most reef hobbyists prefer ferric oxide hydroxide-based formulas.

filtration is a must for clean, clear, pure, and pollutant-free aquarium water.

Resins

Resins attract and remove specific water toxins via ion exchange. Within this process, resins draw charged toxins, such as ammonia, from the water column and exchange them with less harmful compounds, such as sodium. They work in the same principle as zeolite and are also available in both natural and synthetic forms. The greatest advantage of most resins is that oftentimes a single resin formula works to neutralize a variety of aquarium pollutants.

This multi-faceted chemical filter media is especially beneficial in existing filtration systems without room for multiple filter media or the capacity to expand. Most resins remain highly active over long periods of time with little fluctuation in absorptive capabilities. This makes resins suitable for use with more demanding fish and corals that thrive only in aquariums with high water quality.

RECOMMENDED PRODUCTS

Removes heavy metals, copper, phenol, ammonia and other nitrogenous waste in marine and freshwater aquariums. Helps keep pH consistently at a safe range and water sparkling clear.

Eliminates foul odors, unsightly discoloration, and harmful organic substances.

Reduces stress and mortality rates as it protects against ammonia spikes and further toxic buildup.

Permanently removes phosphate as well as heavy metals from water. PhosPure® plus Zeolite & Carbon removes phosphate AND ammonia.

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