Aquarium Filter Media Overview

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Filter media are the heart of proper aquarium filtration and healthy aquarium inhabitants. They influence aquarium water quality and the overall health of your aquarium by maintaining the nitrogen cycle and removing harmful pollutants. There are three basic types of aquarium filter media and each performs a different job to help keep a clean and healthy aquarium environment.

Filter Media Types

- Mechanical
- Biological
- Chemical

Mechanical Media

Mechanical filter media physically trap and remove debris and particles from aquarium water. Materials such as fish excrement, sludge, uneaten food, or dust are strained from the water column as it passes through mechanical filter media. This keeps aquarium water clean, clear, and free of floating particles. Mechanical filter media are available in different grades to remove particles of varying size - coarse media to trap large particles and fine media to trap very small particles. Mechanical filter media also helps biological media to perform its best by preventing particulate matter from clogging the biological filter media.

Biological Media

Biological media is any inert material used to cultivate beneficial bacteria involved in the nitrogen cycle. The large surface area of biological media houses an enormous amount of beneficial bacteria to efficiently process harmful compounds. As aquarium water passes through the media, it brings organic waste materials to the bacteria so they can break it down into less harmful components. Efficient biological filtration relies heavily on good water movement.

Chemical Media

Chemical filter media removes pollutants and other unwanted materials through chemical reactions. Used properly, chemical filter media is an extremely convenient way to maintain proper water quality for an extended period of time. Chemical filter media strengthens the filtering capacity of any filtration system by removing pollutants mechanical and biological media are unable to remove. Whether a single impurity or a variety of impurities, there is a chemical filter media capable of removing it.

These three different aquarium filter media work in harmony to create a healthy environment for your aquarium inhabitants. Strive for a 3-stage aquarium filter that incorporates all three media types to ensure aquarium success.

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