



Aquarium Professionals Group

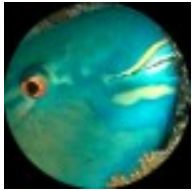
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Aquarium Additives vs. Supplements What are they and what do they do?

Aquarium Additives



In today's aquaria, water conditioners and aquarium additives have become necessary tools for the aquarist. If only our tap water was perfect and all aquarium fish could share the same water conditions, maintaining aquaria would be so much easier. Unfortunately, many tap water sources are far less than perfect. Tap water conditioners have become a mandatory part of good aquarium management. The chemistry of water from different regions of the world is as different as nature is complex. Aquarium additives allow us to easily adjust water pH, hardness, alkalinity and other parameters to match the water in our aquariums to the natural aquatic habitats of the fish and invertebrates we keep.

Aquarium additives are used to make new water safe for aquaria and to adjust the chemistry of water. There are two general categories of additives: water conditioners used to make the raw tap water safe for aquaria, and dry or liquid compounds that are used to adjust the pH, hardness and alkalinity of an aquarium.

Water conditioners are necessary if you live in a municipal area where tap water is treated to remove bacteria, algae and other microorganisms and contaminants. Water conditioners should also be used on well water that is high in certain metals or minerals such as iron, nickel, copper or sulfur that may adversely affect sensitive fish or invertebrates. A good water conditioner will neutralize chlorine, chloramine and heavy metals in the tap water without adding phosphates or nitrates to the aquarium. Many water conditioners also add electrolytes and polymeric compounds to the aquarium which help to prevent stress in fish as a result of water changes. Good water conditioners do not affect water chemistry and may be safely used in all aquaria. When in doubt, it is better to use them than to risk problems that might occur during or after water changes.

Aquarium additives are available to adjust the pH, hardness and alkalinity of any type of aquarium in situations where it is necessary or desirable to match these water quality parameters to the native habitat of certain tropical fish and invertebrates. These are used primarily in marine aquaria, but some tropical freshwater fish require specific water conditions to thrive or breed in captivity.

Before and after adjusting these water quality parameters, it is important to test the water for each value to be adjusted. It is also important to not adjust water quality too rapidly. Nearly all fish and invertebrates will suffer from rapid changes in water quality.

Nutritional Supplements

Just as we require good nutrition in order to survive, so do aquatic plants, animals and macro algae. In the wild, most fish eat a wide variety of foods. In most cases, it is impossible to duplicate their diet in captivity. Plants and invertebrates in freshwater and saltwater absorb many of the nutrients they require from the water around them. The use of aquarium supplements allows us to make sure the tropical fish, invertebrates, plants and macro algae in our aquariums are receiving proper nutrition.

Freshwater fish obtain most of their nutrients from the food they eat. Freshwater fish do not drink water, whereas saltwater fish do. Using vitamin and mineral supplements on food fed to temperate and tropical freshwater fish in captivity will ensure they are getting the right nutrition. Using vitamins directly in the water of marine aquaria will help to improve the health of all saltwater fish. Freshwater plants greatly benefit from fertilizer supplements that are safe for use with fish. Aquarium supplements should be used in almost all saltwater aquaria to replenish nutrients that are used up by

fish, macro algae, and sessile & motile marine invertebrates.