

## ph

**What is pH?** In simple terms the pH value indicates if the water mass is acid, neutral or alkaline. pH is determined on a scale of 0-14. Under 7.0 is acid, 7.0 is neutral and above 7.0 is considered alkaline.

### **What determines my tank's pH?**

1. The biggest factor affecting pH is the water that is used to set up the tank and do water changes. The pH of water varies by location. Some other factors can change a tank's pH without a customer trying or knowing.
2. Nitrification cycle. As harmful ammonia is converted into nitrates by "good" bacteria, nitric acid is produced which can lower a tank's pH.
3. If your tank has a low level of aeration excess carbon dioxide will lower your pH value.

*Certain aquarium chemicals can lower or raise the pH of a tank.*

**Why should I know what my pH is?** Even though most aquarium fish will tolerate a wide range of pH (6.6 - 7.2) without dying, pH will affect the toxicity of the ammonia in your aquarium. When your pH is above 7.0 it combines with ammonia to make a very harmful combination. When your pH is below 7.0 (acid) your ammonia's toxicity is reduced.

**How do I test my pH?** We sell inexpensive pH test kits that are easy to use and read. If you have trouble determining the results of your pH test, bring in your water and we will test it for you.

**Should I adjust my pH?** Yes. It is safer to have your tank's pH below 7.0 because it lessens the toxicity of ammonia. In some areas it is difficult to keep your pH below 7.0 because of local water conditions. Some choose not to adjust their pH and work to keep ammonia low, feeling this is easier than trying to manage pH.

**How do I adjust my pH?** This is not a big deal. Owners of swimming pools are doing it all the time!

### **If your pH is above 7.0 and you want to lower it:**

- You will need a pH test kit and pH adjusting chemicals.
- Follow the instructions for whatever type of adjusting chemicals you buy.
- pH may bounce up and down. After changing your pH, retest it daily for 3 days. If it starts to change add more pH adjuster. Eventually the pH will stabilize until your next water change.
- When doing a water change you should adjust the pH of your tap water before refilling the tank. You could adjust the pH of the new water to match the current pH in your tank, if it is at an acceptable level.

### **If you want to raise your pH:**

- Test your tap water. If your tap water is above 7.0, do a water change as the fresh tap water will raise the pH in the tank.