



PONDLAB

pH - Acidity (40 tests)

The pH value of water indicates whether it is acid, neutral or alkaline, and this designation depends on the ratio of Hydrogen ions (H⁺) to Hydroxyl ions (OH⁻). Acid water has a greater proportion of H⁺, and Alkaline water has a greater proportion of OH⁻. Neutral water has equal amounts of the two.

Monitoring the pH value is extremely important to fishkeepers. Some fish such as Discus, some Dwarf Cichlids, Tetras etc have evolved in water that has a low pH (Around 6.0). Others such as the Rift Valley Cichlids have evolved in water with a very high pH (Around 9.0). Thus when kept in the aquarium these fish must be in water of the correct pH if they are to thrive, resist disease, and show full colouration.

The pH of water in a closed system such as a pond or aquarium is not a constant value. There are many factors that can cause the pH to tend to rise (pH up) or drop (pH down).

As the living organisms in the pond or aquarium respire, they release carbon dioxide (CO₂). This dissolves in the water as carbonic acid; pH down

The biological filtration system releases hydrogen ions and nitrate ions as part of the nitrogen cycle, which will lower the pH; pH down

If Plants or algae are present they will remove carbon dioxide during hours of daylight as part of photosynthesis; pH up. However at night this process stops, but the plants continue to respire producing carbon dioxide; pH down.

Pond concrete can leach into the pond water causing pH increases: pH up.

Thus it is extremely important to monitor the pH regularly as this value is influenced by many variables.

The pH is held constant and these fluctuations counteracted by the buffer system. Test the strength of your buffer using a KH test Kit (carbonate hardness of total alkalinity).

Pondlab pH-Acidity is a broad range test kit for ponds.