

WHY TEST?

- Knowing your water quality allows you to select fish species best suited to your local water supply.
- Regular monitoring of your water quality lets you know that equipment is functioning properly.
- When vital water parameters fall outside the desired range for your fish selections, maintenance may be required.
- Testing helps you to diagnose and troubleshoot fish health issues or visual water quality concerns (e.g. cloudiness).

WHAT PARAMETERS CAN I TEST WITH THESE STRIPS?

The pH value of water is a measure of the degree of acidity and alkalinity, with values ranging from 1 (extremely acidic) through 7 (neutral) to 14 (extremely alkaline). All fish, plants and microorganisms are very sensitive to drastic and sudden changes in the pH level. A pH value between 6.5 and 7.8 will be tolerated by most species of freshwater fish. However, ideal pH ranges are species dependent.

Carbonate Hardness (KH), or alkalinity is a measure of the water's buffering capacity; a measure of the water's ability to resist changes in pH caused by the additions of acids or bases. Bicarbonates in the water act as pH buffers and can prevent sudden and rapid pH changes. Favorable KH values are between 80ppm and 180ppm.

General Hardness (GH), sometimes called the "true or permanent hardness" is a measure of the concentration of calcium and magnesium salts in the water. The GH level directly influences the cell function of fish, plants and microorganisms. Most aquarium fish can live in water with hardness values between 100ppm and 300ppm. However, many areas of the US have naturally hard water that may not be suitable for certain fish, especially certain Tetras. Reducing hardness can be accomplished by specialized methods such as; household water softeners, reverse osmosis filters, deionization, peat and water softening resins. If in doubt, consult with TetraCare™ or your local retailer.

Nitrite (NO₂⁻) is the by-product of ammonia oxidation by natural bacteria. High levels of nitrite in the aquarium are toxic to fish. Nitrite toxicity is also affected by pH, it is more toxic in acidic levels of pH (below 6.0). If nitrite levels test positive, a partial water change is recommended along with a general review of maintenance and filtration. It may take several changes over a period of days to reduce nitrite levels.

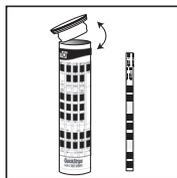
Nitrate (NO₃⁻) is the end product of "aerobic" biological filtration. It is essentially non-toxic to freshwater fish. However, nitrate presence and accumulation in the fish aquarium is an excellent first indicator of deteriorating water quality. High nitrate levels indicate that a partial water change should be performed.

WHAT TO DO WHEN VALUES ARE TOO HIGH OR TOO LOW?

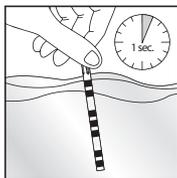
- When nitrite and/or nitrate concentrations are too high, carry out a partial (1/2 or 1/3) water change. Always condition your clean replacement water with Tetra AquaSafe®.
- When your GH level is too high, add distilled water to your tank or consider specialized filtration options mentioned above.
- When your GH/KH level is too low, add calcium carbonate, dolomite stone or marble chips to your tank to increase the GH and KH levels.
- Regular use of EasyBalance stabilizes pH and KH levels.

HOW TO TEST?

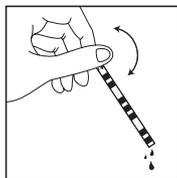
Remove a test strip and carefully re-seal the container. Without touching the test fields with your fingers, **dip** the test strip into the water for about 1 second (the arrows should point to the water surface). **Shake** off excess liquid and **wait** 60 seconds. **Compare** the test strip colors with the scale on the tube. Do not hold strips under flowing water.



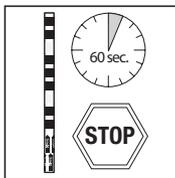
REMOVE



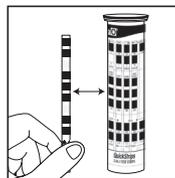
DIP



SHAKE



WAIT



COMPARE

TIPS ON WATER QUALITY MAINTENANCE

- Ask your retailer to advise you on the number and the size of the fish a tank of a given capacity can reasonably support. Generally the rule of thumb is 1" of fish per gallon. If in doubt err on the side of under stocking.
- Carry out regular (monthly) partial water changes and remove plant and food remains from the bottom of the aquarium with a gravel vacuum. Always condition your clean replacement water with Tetra AquaSafe to neutralize any dissolved chlorine, chloramines and heavy metals.
- Change your filter cartridge as instructed. As appropriate, clean biological filter media in old aquarium water to avoid severe losses of the beneficial microorganisms that are essential to the breakdown of aquarium pollutants. Regular cleaning will also prevent it from silting and clogging up.
- You may feed your fish 3 or even 4 times a day but never feed fish more food than they can eat over a period of 3 to 5 minutes. We recommend you use only Tetra foods that are prepared and packaged to eliminate any possibility of contamination.
- Tetra EasyBalance® provides alkalinity and pH stabilizers that can prevent sudden, dramatic swings in pH that can be harmful to fish. Regular addition of EasyBalance can also keep nitrate levels low.
- Invest in a good book about fish keeping. Look for a book that has information on the ideal water parameters for the fish you are keeping or thinking of purchasing.
- Still have other questions? Ask your favorite local retailer or TetraCare.

FOR MORE INFORMATION

Need Advice? There's TetraCare.™ Free Online and Toll-free Assistance.

Log on to www.tetra-fish.com and register for TetraCare. You'll receive assistance setting up and maintaining your aquarium. Assistance includes animated instructions for setting up your aquarium, plus a series of e-Minders (fish care e-mails) to guide you through maintenance activities. In addition, you'll have immediate answers to your questions through:

- The website - www.tetra-fish.com.
- E-mail (always answered within 24 hours).
- Live telephone support from TetraCare Consumer Support Center at **1-800-423-6458**.



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SAVE THESE INSTRUCTIONS