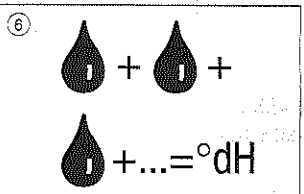
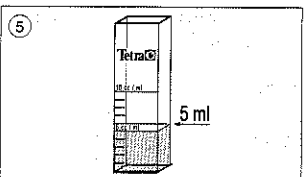
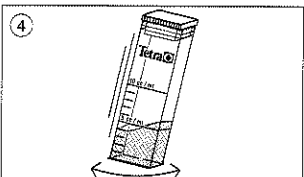
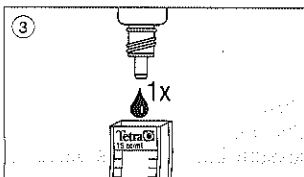
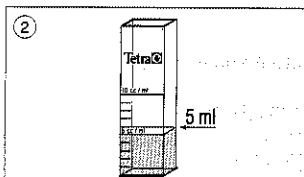
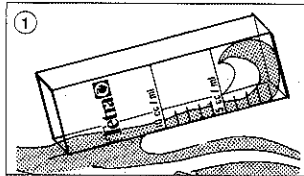


Tetra^{test}® GH/KH



- necessary to cause a color change from Red to Green
- The number of drops added until the color changes represents the level of hardness (German hardness)

How to test for Carbonate Hardness (KH):

- Rinse the test vial with the water to be tested
- Fill the test vial to the 5ml (cc.) mark with the water to be tested
- Hold the liquid reagent bottle upside down and add a drop at a time to the test vial.
- Gently shake the vial after each drop and count the number of drops necessary to cause a color change from Blue to Yellow
- The number of drops added until the color changes represents the level of hardness (German hardness)

After each test, rinse vial thoroughly with tap water

Note: The measuring accuracy increases if the test is performed with 10ml of aquarium water (1 drop testing fluid = 1/2° dH).

If you experience an immediate color change with either kit (for example with the GH kit the sample immediately turns green with no red intermediate color forming or with the KH kit the sample immediately turns yellow with no blue intermediate color forming) then your water sample is likely to be extremely soft with less than one degree of hardness.

After the Test

If the test results reveal excessive hardness (GH or KH), this can be reduced by adding softer water, e.g. rainwater, distilled water, or water treated with a reverse osmosis unit. Water can also be softened by filtering it through peat.

Always condition your clean replacement water with Tetra AquaSafe to neutralize any dissolved chlorine and heavy metals.

GH

WARNING - FLAMMABLE. EYE IRRITANT.

CONTAINS PIPERAZINE, ERIOCHROME BLACK T, MENTANIL YELLOW, AND ETHYL ALCOHOL (ETHANOL).

WARNING

Do not use near heat or flame. Avoid contact with eyes. In case of eye contact, immediately flush with plenty of water. Seek medical attention if irritation persists. Use only in a well-ventilated area. Keep out of reach of children.

KH

WARNING - COMBUSTIBLE.

CONTAINS ETHYL ALCOHOL (ETHANOL).

WARNING

Do not use near heat or flame. Use only in a well-ventilated area. Keep out of reach of children.

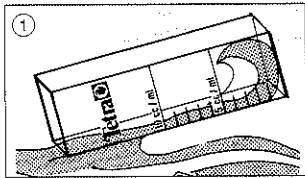
For more information contact:
Tetra Sales, USA
3001 Commerce Street
Blacksburg, VA 24060

TetraWerke
Dr. rer. nat. Ulrich Baensch GmbH
D-49304 Melle, Made in Germany

Tetra®
www.tetra-fish.com

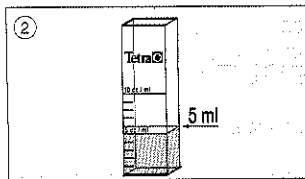
Tetra^{test} GH/KH

Instruction leaflets

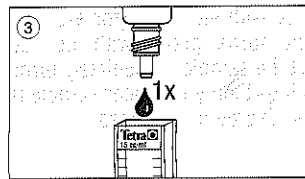


Tetra^{test} GH (General Hardness)
For Freshwater and

Tetra^{test} KH (Carbonate Hardness)
For Freshwater and Marine aquariums

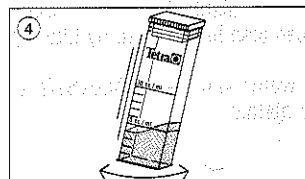


For an accurate determination of the general hardness (for freshwater) and carbonate hardness (for freshwater and marine aquariums).



Important: the Tetra^{test} GH Test Kit is suitable for testing water from tropical and cold water aquariums or garden ponds. It should not be used for marine aquariums as the GH exceeds 250-300° dH.

The Tetra^{test} KH test kit is suitable for testing water from tropical, cold water aquariums or garden ponds as well as from marine aquariums.



Why test?

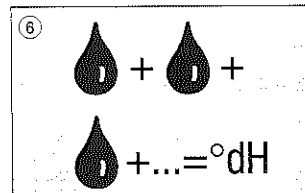
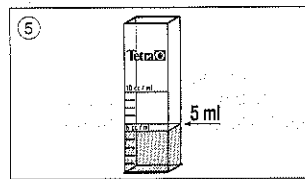
Tap water and thus aquarium water demonstrate a variety of chemical characteristics depending largely on the water source used to fill them. Two of the most important values of water quality are the general and carbonate hardness. The Tetra^{test} kits measure both of these values in German degrees of hardness dH.

The general hardness (GH) of the water is a measure of the dissolved calcium and magnesium salts. These salts directly influence the metabolism of fish, plants and microorganisms. Water with a high calcium and magnesium salt content is referred to as hard and with a low content as soft. Most freshwater fish thrive at a general hardness level between 6° - 16° dH.

The carbonate hardness (KH) of the water is determined by the carbonate and bicarbonate content. This measurement is particularly important as the KH and pH values are interdependent:

- The higher the KH value of the water, the more alkaline it is, i.e. the pH value is increased. Due to the buffering effect of the high KH value, the pH is stabilized against fluctuations.
- The lower the KH value the more acid the water, i.e. the pH value is decreased and is less pH stable. There is also the risk of marked fluctuations in the pH values, which are dangerous for fish and plant life.

A KH value of 3°-10° dH is recommended for most freshwater fish. Seawater fish require higher values between 8°-10° dH.



How to test for General Hardness (GH) :

1. Rinse the test vial with the water to be tested
2. Fill the test vial to the 5ml (cc.) mark with the water to be tested
3. Hold the GH liquid reagent bottle upside down and add a drop at a time to the test vial.
4. Gently shake the vial after each drop and count the number of drops