PAPI

GH & KH TEST KIT INSTRUCTIONS

Why Test for KH (Carbonate Hardness) ; H (General Hardness)?

Tap water rarely provides the water conditions necessary to maintain an optimal aquarium. Some tap water to maintain an optimal aquarium. Some tap water supplies have very low KH (below 3 °dKH) which can contribute to wide pH swings in the aquarium. porates, it leaves behind hardness ions. with tap water simply adds more minerals to water evaporates, Topping off the aquarium, resulting in a steady increase in GH. It is therefore necessary to test the GH and KH to monitor ater quality and prevent str essful conditions



To remove childproof safety cap: With one hand, push red tab left with thumb while unscrewing cap with free hand.

- Directions for Testing KH

 Fill a clean test tube with 5 ml of water to be tested (to the line on the tube).

 Holding the bottle vertically, add KH Test Solution, drop at a time. Be sure to count the number of drops
- being added.

 Cap test tube & invert several times after each drop.

 The test is completed when the water in the test tube, after having been shaken, turns from blue to
- Tube, after noving been snaken, turns from blue to yellow. If you have difficulty discerning the color after the first drop of test solution is added, remove the cap from the test tube and, while holding it over a white background, look down through the tube. The KH value is determined by the number of drops of test solution that must be added to turn the water in the test tube bright yellow. See GH & KH 5.

Conversion Chart at end of instructions

- ctions for Testing GH Fill a clean test tube with 5 ml of v
- be tested (to the line on the tube).
 Holding the bottle vertically, **add GH Test Solution**, 2. drop at a time. Be sure to count the number of drops
- arop at a time. Be sure to count the number of arops being added.

 Cap test tube & invert several times after each drop. The test is completed when the water in the test tube, after having been shaken, turns from orange to green. If you have difficulty discerning the color after the first drop of test solution is added, remove the cost free the test the and which bedien it were 3
- anet me mist adop of nest solution is daded, remove the cap from the test tube and, while holding it over a white background, look down through the tube. The GH value is determined by the number of drops of reagent that must be added to turn the water in the test tube green. See GH & KH Conversion Chart 5

at end of instructions. What the Test Results Mean

What the less results weam use the table below to create the ideal water hardness levels for your aquarium fish. When keeping a community aquarium with a variety of tropical fish, adjust the GH and KH to 3 - 6° (50-100 ppm). GH & KH Range Aquarium Life . 3

Discus, Arowana, Elephantnose, Neons, Cardinals, Live Plants (0-50 ppm) Most tropical fish including Angelfish, Cichlids, Tetras, Botia, Live Plants (50-100 ppm) - 11º 6°

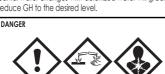
Most tropical fish including Swordtails, Guppies, Mollies, Goldfish (100-200 ppm) Marine fish and invertebrates

8° - 12° (140-200 ppm) 11° - 22° (200-400 ppm) Rift Lake Cichlids, Goldfish, Brackish Water Fish

djusting KH Partial water changes can be used to decrease KH. To increase KH use API PROPER pH® buffers. PROPER pH 6.5, 7.0 and 7.5 are non-carbonate buffers that automatically

ust pH and increase KH. PROPER pH 8.2 is a carbonate

buffer suitable for marine and African Cichlid aquariums. Adjusting GH in Freshwater Aujusting on in treshwater
GH can be lowered with API WATER SOFTENER PILLOW,
which removes calcium and magnesium ions. Also,
partial water changes with deionized water will gradually
reduce GH to the desired level.



GH TEST SOLUTION
Causes skin irritation • Cause irritation • Causes serious eye damage • May cause ar Cases skin inflation · Causes serious eye damage * May cause an areiga sxin reuxuur i May cause respiratory inflation · May cause damage to argans through prolonged or epecialed exposure · Do not breather dustiffumelgostimist/hapas/sproy · We only in outdoors or in a well-ventillated area · Wear protective gloves/protective clothes/eye protection/face protection · Contaminated work clothing should not be allowed out of the workplace · RINETEX trase contiously with water for several minutes. Remove contact eness, if present and easy to do. Confinue rinsing · Immediately cold in POSOM. me worspoce • it in LETE: kinse cultiously with water for several minutes, Remove controc lenses, if present and easy to do. Confirme rinsing • Immediately cal a POSON CENTEX/Doctor/physicion/first aides * Specific treatment [see advice on this lobel] • if ON SION: Wosh with plenty of water and soop. • if six initiation or resh occurs get medica odvice/attention • Toke off confirmated clothing and wash before reuse • if NHALED Remove person to fesh air and keep comfortable for breathing • Stare locked up • Store in a well-venifiated place • Keep container lightly closed • Dispose of contents/containe to outhorized chemical landfill or if arganic to high temperature incineration.

Questions or Comments?
In North America, call us at 1-800-847-0659.
Or visit us at www.apifishcare.com www.facebook.com/apifishcare

GH & KH CONVERSION CHART		
# of Drops	°dKH	ppm GH/KH
1	1	17.9
2	2	35.8
3	3	53.7
4	4	71.6
5	5	89.5
6	6	107.4
7	7	125.3
8	8	143.2
9	9	161.1
10	10	179
11	11	196.9
12	12	214.8
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