## KH/Alkalinity Profi Test

The KH/Alkalinity test can be used for testing:

- Marine water
- Fresh water
- Garden pond water
  - Fresh water aquarium

The KH-Ind reagent contains a dye. Avoid spilling the dye on fabric and other materials since they may become stained. Keep out of reach of children. Not for consumption.

## INSTRUCTIONS

- 1] Add with the 5 ml syringe 4 ml of water in the test vial. For a lower resolution and more tests per kit add 2 instead of 4 ml.
- 2] Shake the KH-Ind dropping bottle a few times and add 2 drops in the test vial (1 drop for the low resolution mode).
- 3] Put the plastic tip firmly on the 1 ml syringe. And draw into the syringe the KH reagent (ensure that the end of the plastic tip is constantly submersed in the KH reagent) till the lower end of the black part of the piston is exactly at the 1.00 ml mark. There will be some air present just below the piston. This is the air which was present between the end of the plastic tip and the piston. This will not influence the test result.
- 4] Add dropwise with the 1 ml syringe the KH reagent to the water in the test tube. Swirl after each drop a second or two. Continue with this until the color changes from blue/green to a orange-red or pink color (whichever color is observed first).
- 5] Hold the syringe with the tip facing upward and read the position of the , now the upper end , of the black part of the piston. The syringe has graduations of 0.01 ml. Read the KH or alkalinity value from the table or calculate as follows.

KH in dKH =  $(1 - \text{reading in step 5}) \times 16$ Alk in meq/L =  $(1 - \text{reading in step 5}) \times 5.71$ 

If you have chosen for the lower resolution multiply the calculated result by 2.

Natural sea water has a KH of 8 dKH or alkalinity of 2.9 meg/l

KH and alkalinity are increased safely with Salifert's KH + pH Buffer.

## KH / Alkalinity Table

If you took 2 ml of water in step 1 then multiply the KH and alkalinity values by 2!

| KH and alkalinity values by 2! |            |              |
|--------------------------------|------------|--------------|
| Reading in ml's                | KH value   | Alkalinity   |
| (Step 5 )                      | in dKH     | in meq/L     |
| 0.00                           | 16.0       | 5.71         |
| 0.02                           | 15.7       | 5.60         |
| 0.04                           | 15.4       | 5.49         |
| 0.06                           | 15.0       | 5.37         |
| 0.08                           | 14.7       | 5.26         |
| 0.10                           | 14.4       | 5.14         |
| 0.12                           | 14.1       | 5.03         |
| 0.14                           | 13.8       | 4.91         |
| 0.16                           | 13.4       | 4.80         |
| 0.18                           | 13.1       | 4.69         |
| 0.20                           | 12.8       | 4.57         |
| 0.22                           | 12.5       | 4.46         |
| 0.24                           | 12.2       | 4.34         |
| 0.26                           | 11.8       | 4.23         |
| 0.28                           | 11.5       | 4.11         |
| 0.30                           | 11.2       | 4.00         |
| 0.32                           | 10.9       | 3.89         |
| 0.34                           | 10.6       | 3.77         |
| 0.36                           | 10.2       | 3.66         |
| 0.38                           | 9.9        | 3.54         |
| 0.40                           | 9.6        | 3.43         |
| 0.42                           | 9.3        | 3.31         |
| 0.44                           | 9.0        | 3.20         |
| 0.46                           | 8.6        | 3.09         |
| 0.48                           | 8.3        | 2.97         |
| 0.50                           | 8.0        | 2.86         |
| 0.52                           | 7.7        | 2.74         |
| 0.54                           | 7.4        | 2.63         |
| 0.56                           | 7.0        | 2.51         |
| 0.58                           | 6.7        | 2.40         |
| 0.60                           | 6.4        | 2.29         |
| 0.62                           | 6.1        | 2.17         |
| 0.64                           | 5.8        | 2.06         |
| 0.66                           | 5.4        | 1.94         |
| 0.68                           | 5.1        | 1.83         |
| 0.70                           | 4.8        | 1.71         |
| 0.72                           | 4.5        | 1.60         |
| 0.74                           | 4.2        | 1.49         |
| 0.76                           | 3.8        | 1.37         |
| 0.78                           | 3.5        | 1.26<br>1.14 |
| 0.80                           | 3.2        | 1.14         |
| 0.82                           | 2.9<br>2.6 | 0.91         |
| 0.84                           | 2.0        | 0.91         |
| 0.86<br>0.88                   | 2.2<br>1.9 | 0.69         |
| 0.90                           | 1.6        | 0.57         |
| 0.92                           | 1.3        | 0.46         |
| 0.94                           | 1.0        | 0.34         |
| 0.96                           | 0.6        | 0.23         |
| 0.98                           | 0.3        | 0.11         |
|                                | *          |              |