

Carbonate Hardness (KH)

Some water supplies have very soft water “low on carbonate hardness (KH)” this means your pond will have no pH buffer and so there will be large swings in pH throughout each day.

If you have fish this will place great stress on them and they will become ill. The carbonate hardness needs to be above 100 parts per million (100 ppm) this will buffer the pH and keep it stable.

The simplest way to buffer pH is described below:

Test the pond water with an “API” KH test kit.

#1- Rinse the test tube & cap in pond water

#2- Fill the test tube to the 5 ml mark with pond water

#3- Put 1 drop of test solution in, cap and shake. The water should turn blue

#4- Repeat #3 until the water turns yellow.

- If it turns yellow on the 6th drop of solution or above then the pond water is over 100 ppm KH and will stay stable.
- If it turns yellow on 5-drops or less, then add ½ a cup of sodium bicarbonate (baking soda) per 4,000 litres of pond water this will bring the test up by 1-drop (20 ppm) for small volumes add about ¼ teaspoon for every 40 litres. (do not raise the KH by more than 1-drop (20 ppm) inside a 24 hour period, this gives the fish time to adjust)
- When adding sodium bicarbonate, dissolve it in half a bucket of pond water then spread it around the pond.
- Try to keep the pond water around 6 or 7 drops. If it is above, that's O.K. and it will naturally come down in time.

NOTE: Carbonate Hardness will get used up over time and will need checking periodically.

NOTES:
