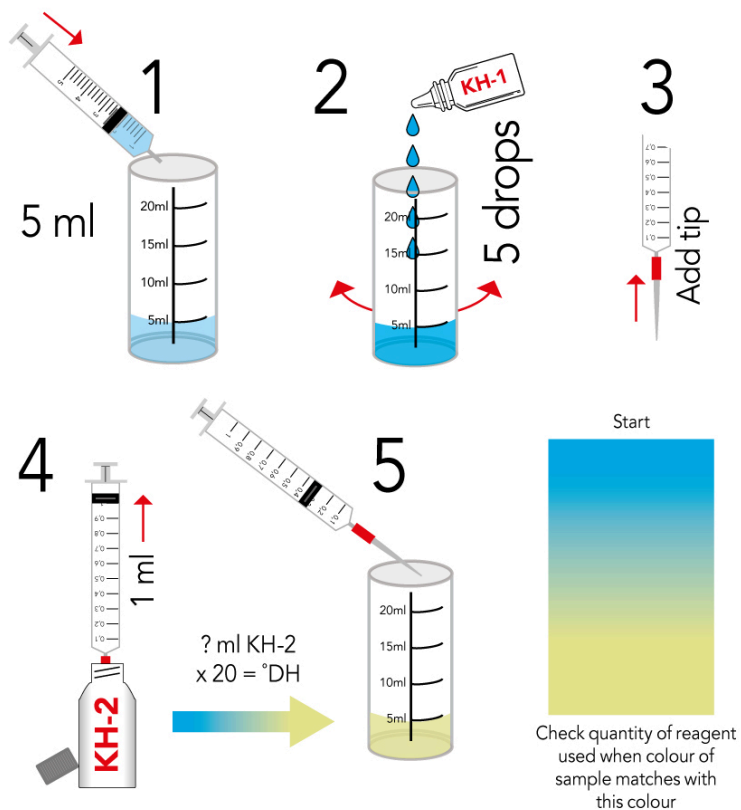




Marine KH Test

User manual

EN

Understanding and adjusting the KH value

The KH is the so-called carbonate hardness or temporary hardness; in German Karbonathärte, abbreviated to KH. The KH is made up by forms of carbonic acid like bicarbonate and carbonate. The chemical balance between these substances leads to a stable pH and thus the adequate presence of these substances is essential for a stable pH; a stable pH in its turn is essential for the well-being of the fish. The KH is therefore often called the buffering capacity of the water.

Especially in older aquaria, the pH and KH have a tendency to decrease, especially when there are no or little water changes. Hence, test the KH regularly and refresh 10% of the water weekly.

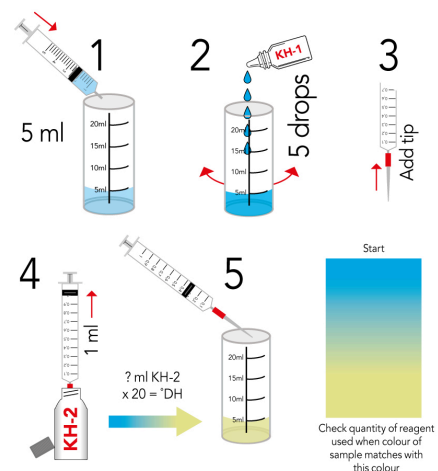
An optimal pH-buffer in seawater is obtained with a KH between 8 and 12°DH. When the KH is lower than 8°DH, you can increase it with Colombo Marine KH Plus.

General Guidelines

- Always take care that the test tube is clean before use.
- Clean the tube directly after use.
- Take the volume of the water sample as precisely as possible.
- Keep the drop bottle perfectly vertical during dropping.
- Take care that no air bubbles are included in the drops.

Test procedure:

1. Take a water sample of 5 ml.
2. Add 5 drops of KH-1 test fluid and mix. The sample should turn lightblue; when it turns yellow, the KH of the water is lower than 1°DH.
3. Mount the plastic tip onto the 1 ml syringe and fill the syringe with KH-2 test fluid. Above the fluid an air bubble will appear, this is normal. The air compensates for the volume in the tip.
4. Add the fluid slowly until the sample colours yellow.
5. Multiply the volume of KH-2 test fluid (in ml) required to change the colour from blue to yellow by 20 to determine the KH value in °dH. Alternatively, use the chart in this manual.



Colombo Marine Carbonate Hardness (KH)

Qty KH-2 added	KH (°DH)	Qty KH-2 added	KH (°DH)
0.30	6.0	0.50	10.0
0.31	6.2	0.51	10.2
0.32	6.4	0.52	10.4
0.33	6.6	0.53	10.6
0.34	6.8	0.54	10.8
0.35	7.0	0.55	11.0
0.36	7.2	0.56	11.2
0.37	7.4	0.57	11.4
0.38	7.6	0.58	11.6
0.39	7.8	0.59	11.8
0.40	8.0	0.60	12.0
0.41	8.2	0.61	12.2
0.42	8.4	0.62	12.4
0.43	8.6	0.63	12.6
0.44	8.8	0.64	12.8
0.45	9.0	0.65	13.0
0.46	9.2	0.66	13.2
0.47	9.4	0.67	13.4
0.48	9.6	0.68	13.6
0.49	9.8	0.69	13.8
0.50	10.0	0.70	14.0