

# Seawater and Fresh Water Alkalinity

## Handheld Colorimeters

- Easier to use and more accurate than chemical test kits
- Dedicated to a single parameter
- Small size, big convenience
  - Weighing a mere 64 g (2.25 oz.), the Checker®HC easily fits into the palm of your hand or pocket
  - Use for quick and accurate on-the-spot analysis
  - Single-button operation: zero and measure
  - Operated by a single AAA battery
- Ideal for:
  - Saltwater aquariums (HI755, HI772)
  - Fresh water aquariums (HI775)
  - Swimming Pools and Spas (HI7754)



Alkalinity is one of the most important parameters to measure in aquariums. It helps to maintain a stable pH, an important factor for most aquatic life. In seawater, bicarbonate is the largest contributor to alkalinity and is a critical element needed for healthy corals. Corals need bicarbonate and carbonate available to form their skeletons. Without an adequate level, healthy coral growth is not possible. Since bicarbonate levels can be difficult to determine, total alkalinity is measured instead. The alkalinity of natural seawater is typically 125 ppm CaCO<sub>3</sub> (equivalent to 7 degrees of carbonate hardness, or dKH). In saltwater aquariums, typical alkalinity values can range from 125 to 200 ppm CaCO<sub>3</sub> (7 to 11.2 dKH).

The HI755, HI775, HI7754, and HI772 Checker HC's are simple, accurate, and cost effective ways to measure alkalinity in seawater and fresh water. Designed as a more accurate alternative to chemical test kits, these handheld colorimeters provide quick, accurate alkalinity testing results in four easy steps.

**Step One** - Add a sample to the included cuvette(s).

**Step Two** - Insert sample into the Checker HC and press the button to zero.

**Step Three** - Remove sample and add reagent as stated in the manual.

**Step Four** - Reinsert sample and press the button to measure your results.



Specifications	HI755 (Seawater)	HI775 (Fresh water)	HI7754 (Fresh water)	HI772 (Seawater)
Range	0 to 300 ppm (as CaCO <sub>3</sub> )	0 to 500 ppm (as CaCO <sub>3</sub> )	0 to 500 ppm (as CaCO <sub>3</sub> )	0.0 to 20.0 dKH
Resolution	1 ppm			0.1 dKH
Accuracy	±5 ppm ±5% of reading @ 25 °C (77 °F)			±0.3 dKH ±5% of reading @ 25 °C (77 °F)
Light Source	Light Emitting Diode @ 610 nm			
Light Detector	Silicon photocell			
Method	Colorimetric Method. The reaction causes a distinctive range of colors from yellow to greenish blue to develop.			
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing			
Battery Type	1.5V AAA Alkaline			
Auto-off	After 10 minutes of non-use	After 10 minutes of non-use and 2 minutes after reading		After 10 minutes of non-use
Dimensions	86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5")			
Weight	64 g (2.3 oz)			
Ordering Information	<b>HI755 Checker®HC</b> is supplied with sample cuvette and cap (2 pcs.), Marine Alkalinity reagent starter kit (reagents for 25 tests, 1 mL syringe with tip (1 pc.), 1.5V AAA Alkaline battery (1 pc.), and instruction manual			
	<b>HI775 and HI7754 (Pool Line) Checker®HC</b> are supplied with sample cuvette and cap (2 pcs.), Alkalinity reagent starter kit (reagents for 25 tests), 1 mL syringe with tip, 1.5V AAA Alkaline battery (1 pc.), and instruction manual.			
	<b>HI772 Checker®HC</b> is supplied with sample cuvette and cap (2 pcs.), Marine Alkalinity reagent starter kit (reagents for 25 tests), 1 mL syringe with tip, 1.5V AAA Alkaline battery (1 pc.), and instruction manual.			
Reagent Set	<b>HI755-26</b> Reagents for 25 Marine Alkalinity tests	<b>HI775-26</b> Reagents for 25 Alkalinity tests, 1 syringe and 1 tip	<b>HI7754-26</b> Reagents for 25 Alkalinity tests, 1 syringe and 1 tip	<b>HI772-26</b> Reagents for 25 Marine Alkalinity tests, 1 syringe and 1 tip
Calibration Set	<b>HI755-11</b> Marine Alkalinity certified standard kit	<b>HI775-11</b> Alkalinity certified standard kit	<b>HI7754-11</b> Alkalinity certified standard kit	<b>HI772-11</b> Marine Alkalinity certified standard kit
Accessories		<b>HI937554-53</b> Chlorine remover reagent	<b>HI937554-53</b> Chlorine remover reagent	