

# 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
- Ideal for
  - Saltwater aquariums (HI755)
  - Fresh water aquariums (HI775)

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  $\text{CaCO}_3$  (equivalent to 7 degrees of carbonate hardness, or dKH). In saltwater aquariums, typical alkalinity values can range from 125 to 200 ppm  $\text{CaCO}_3$  (7 to 11.2 dKH).

The HI755, HI775 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.

The contoured style of these Checker HCs fit easily in the palm of your hand or pocket and the large LCD is easy to read. The auto shut-off feature assures the battery life will not be drained if you forget to turn it off.



Specifications	HI755 (Seawater)	HI775 (Fresh water)	HI772 (Seawater)
Range	0 to 300 ppm $\text{CaCO}_3$	0 to 500 ppm $\text{CaCO}_3$	0.0 to 20.0 dKH
Resolution	1 ppm	1 ppm	0.1 dKH
Accuracy @ 25°C/77°F	±5 ppm ±5% of reading		±0.3 dKH ±5% of reading
Light Source	LED @ 610 nm		
Light Detector	silicon photocell		
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing		
Battery Type	(1) 1.5V AAA		
Auto-off	after three minutes of non-use and two minutes after ten minutes of non-use after reading		
Dimensions	86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5")		
Weight	64 g (2.3 oz)		
Method	colorimetric method. The reaction causes a distinctive range of colors from yellow to green to blue to develop		
Ordering Information	<b>HI755</b> Checker®HC is supplied with sample cuvettes with caps (2), seawater alkalinity reagent starter kit (reagents for 25 tests), syringe with tip, battery, instructions and quick start guide.		
	<b>HI775</b> Checker®HC is supplied with sample cuvettes with caps (2), alkalinity reagent starter kit (reagents for 25 tests), syringe with tip, battery, instructions and quick start guide.		
	<b>HI772</b> Checker®HC is supplied with sample cuvettes with caps (2), seawater alkalinity reagent starter kit (reagents for 25 tests), syringe with tip, battery, instructions and quick start guide.		
Reagent Set	<b>HI755-26</b> (25 tests)	<b>HI775-26</b> (25 tests)	<b>HI772-26</b> (25 tests)
Calibration Set	<b>HI755-11</b>	<b>HI775-11</b>	<b>HI772-11</b>