

# 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
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  - 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
- Use for quick and accurate on-the-spot analysis
- Ideal for:
  - Saltwater aquariums (HI755, HI772)
  - 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 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 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.

See page 10.138 for Checker HC accessories

Specifications	HI755 (Seawater)	HI775 (Fresh water)	HI772 (Seawater)
Range	0 to 300 ppm CaCO <sub>3</sub>	0 to 500 ppm CaCO <sub>3</sub>	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	1.5V AAA (1)		
Auto-off	after ten minutes of non-use	After ten minutes of non-use and two minutes after reading	after ten 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)		
Method	colorimetric method. The reaction causes a distinctive range of colors from yellow to greenish blue to develop.		
Ordering Information	<p><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.</p> <p><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.</p> <p><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.</p>		
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>