



HI78

## Marine Nitrate Low Range

Handheld Colorimeter

- Ideal for aquariums and marine biology
- Easier to use and more accurate than chemical test kits
- Small size, big convenience

Nitrate is a by-product of the Nitrogen Cycle. Excessive amounts of nitrates in a reef aquarium can promote the growth of undesirable organisms including algae and dinoflagellates while insufficient amounts can lead to starvation in which SPS and other corals will show signs including the loss of color and paleness.

The HI781 Nitrate Checker HC is a handheld colorimeter that uses the Beer-Lambert principle to determine the concentration of nitrate colorimetrically. The HI781 is designed specifically to measure low levels of nitrate in a saltwater aquarium. The 0.00 to 5.00 ppm range is ideal for reef aquarium maintenance.

| Specifications          | HI781 (LR)  |
|-------------------------|---|
| Range                   | 0.00 to 5.00 ppm (as NO <sub>3</sub> -)<br>0.0 to 50.0 ppm (calculated) using dilution  |
| Resolution              | 0.01 ppm  |
| Accuracy                | 0.25 ppm ±2% of reading @ 25 °C (77 °F)<br>±2.5 ppm ± 5% of calculated reading using dilution   |
| Light Source            | Light Emitting Diode @ 525 nm   |
| Light Detector          | Silicon photocell   |
| Method                  | Zinc Reduction method. The reaction between nitrate and the reagent causes a pink/violet tint in the sample. This checker has been developed to work with seawater samples.   |
| Interferences           | Nitrite, copper   |
| Environment             | 0 to 50 °C (32 to 122 °F); max. 95% RH non-condensing   |
| Battery Type            | 1.5V AAA Alkaline   |
| Auto-off                | 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<br>Information | HI781 Checker HC is supplied with Marine Nitrate Low Range reagent starter kit (reagents for 25 tests), sample cuvette and cap (2 pcs.), filter paper (25 pcs.), filter holder (1 pc.), mixing vial and cap (1 pc.), 5 mL syringe with tip (1 pc.), 10 mL syringe (1 pc.), 1 mL graduated syringe (1 pc.), plastic refilling pipette (1 pc.), 16 gauge blunt needle (1 pc.), 1.5V AAA alkaline battery (1 pc.), and instruction manual. |
| Reagent Set             | HI781-25 Reagents for 25 Marine Nitrate Low Range tests   |
| Calibration Set         | HI781-11 Marine Nitrate Low Range certified standard kit  |

