

# Magnesium and Calcium Hardness

## Handheld Colorimeters

- Easier to use and more accurate than chemical test kits
- Dedicated to a single parameter
- Small size, big convenience
- Ideal for:
  - Water purification systems
  - Heating and cooling systems
  - Drinking water
  - Wastewater

The HI719 and HI720 are a simple, accurate, and cost effective way to measure magnesium and calcium hardness respectively.

The HI719 uses an adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th edition, EDTA colorimetric method. The reaction between magnesium and reagents causes a reddish-violet tint in the sample.

The HI720 uses an adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th edition, Calmagite method. The reaction between calcium and reagents causes a reddish-violet tint in the sample.



Specifications	HI719 (Magnesium Hardness)	HI720 (Calcium Hardness)
Range	0.00 to 2.00 ppm (as CaCO <sub>3</sub> )	0.00 to 2.70 ppm (as CaCO <sub>3</sub> )
Resolution	0.01 ppm	0.01 ppm
Accuracy	±0.20 ppm ±5% of reading @ 25 °C (77 °F)	±0.20 ppm ±5% of reading @ 25 °C (77 °F)
Light Source	Light Emitting Diode @ 525 nm	
Light Detector	Silicon photocell	
Method	Adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th Edition, EDTA Colorimetric Method. The reaction between magnesium and reagents causes a reddish-violet tint in the sample.	adaptation of the Standard Methods for the Examination of Water and Wastewater, 18th edition, Calmagite method. The reaction between calcium and reagents causes a reddish-violet tint in the sample
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 Information	<p><b>HI719</b> Checker®HC is supplied with sample cuvette and cap (2 pcs.), Magnesium Hardness reagent starter kit (reagents for 50 tests), 100 mL plastic beaker (1 pc.), 1 mL syringe with tips (2 pcs.), 1.5V AAA Alkaline battery (1 pc.), and instruction manual.</p> <p><b>HI720</b> Checker®HC is supplied with sample cuvette and cap (2 pcs.), Calcium Hardness reagent starter kit (reagents for 50 tests), 100 mL plastic beaker (1 pc.), 1 mL syringe with tip (2 pcs.), 1.5V AAA Alkaline battery (1 pc.), and instruction manual.</p>	
Reagent Set	<b>HI719-25</b> Reagents for 50 Magnesium Hardness tests	<b>HI720-25</b> Reagents for 50 Calcium Hardness tests
Calibration Set	<b>HI719-11</b> Magnesium Hardness certified standard kit	<b>HI720-11</b> Calcium Hardness certified standard kit