

HARDNESS

Instr. #5347

Hardness in water was originally defined as a measure of the water's ability to precipitate soap. In current practice it is considered to be the sum of the calcium and magnesium ions in water, expressed as milligrams per liter (mg/L) or parts per million (ppm) as calcium carbonate (CaCO_3).

The modern way to test for hardness is by titration with EDTA (ethylenediaminetetraacetic acid), an organic chelating agent which reacts with both calcium and magnesium ions. When all calcium and magnesium ions are complexed, the excess EDTA reacts with an indicator to give a characteristic blue color, which is the endpoint.



31 Loveton Circle, Sparks, MD 21152 USA
800-TEST KIT (837-8548) • 410-472-4340