Hardness Test Kit



Fill a plastic tube full (to the top) with sample water.



Pour the contents of the tube into the square mixing bottle.



Add the contents of one UniVer® 3 Hardness Reagent Powder Pillow to the mixing bottle. Swirl to mix.



While swirling the mixing bottle, add Hardness 3 Titrant solution drop by drop. When the sample changes from red to blue, record the number of drops added.



The hardness in grains per gallon as CaCO₃ equals the number of drops of Hardness 3 Titrant solution added in Step 4. Multiply this number by 17.1 (kits prior to 2009) or 20 (kits 2009- present). Please check your kit.

Interferences

Occasionally, a sample of water contains an interference that reacts with the UniVer® 3 Hardness Reagent to produce a color other than pink. For example, iron may cause the indicator to turn orange. If this effect occurs or if interferences are known to exist:

- 1. Add three drops of Hardness 3 Titrant Solution to the water sample before adding the UniVer® 3 Hardness Solution.
- 2. Immediately add the titrant until the color change occurs.
- 3. Count all the drops of Hardness 3 Titrant solution used to determine the hardness of the sample, including the 3 drops added before adding UniVer® 3.