

# Hardness (Total) Test Kit

1 drop = 1 or 10 ppm as  $\text{CaCO}_3$  / 25 mL

## TK3031-Z

blue caps

### KIT COMPONENTS:

EB1775-B  
ED2071-B  
ED2070-B  
VL-1005-V

Total Hardness Reagent, 60 mL  
Hardness Titrant, Low, 60 mL  
Hardness Titrant, High, 60 mL  
Vial, 10-50 mL

### SAFETY TIPS:



Wear  
Gloves



Use Eye  
Protection



Read  
SDS

### TESTING TIPS:



Collect  
Accurate  
Sample



Hold  
Bottles  
Vertically



Ensure  
Proper  
Lighting

**INTERFERENCES:** Metals may cause difficulty in seeing the endpoint. If metal interference is presumed, add one drop of Hardness Titrant to the sample before adding buffer or indicator. Include this drop of titrant when calculating your results.

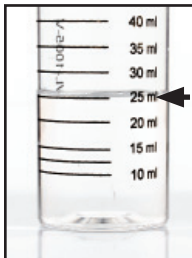
**ATTENTION:** As necessary, calibrate this kit against a known standard made with plant / make-up water. Be sure to collect a representative sample.

**1** Rinse the vial 3 times with the sample to be tested. **Select a sample size** based on the desired drop equivalency and fill the vial.

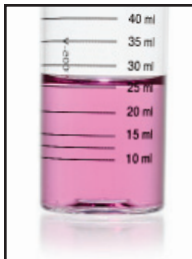
1 drop = 10 ppm	25 mL sample
1 drop = 1 ppm	25 mL sample

**2** Add 5 drops of **Total Hardness Reagent (EB1775)** and swirl to mix.

*Note: The sample will turn red if hardness is present and blue if there is no hardness.*



STEP 1

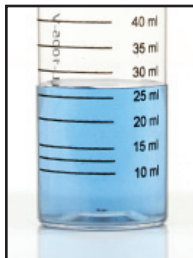


STEP 2

**3** Add **Hardness Titrant** based on chosen equivalency, one drop at a time while swirling. Count the number of drops until the sample color changes from red to blue.

Hardness Titrant, High  
 $\# \text{ drops} \times 10 = \text{ppm as CaCO}_3$

Hardness Titrant, Low  
 $\# \text{ drops} \times 1 = \text{ppm as CaCO}_3$



STEP 3