

# Hardness (Total) Test Kit

1 drop = 0.5 or 10 ppm as  $\text{CaCO}_3$  / 25 mL

## TK3045-Z

blue caps

### KIT COMPONENTS:

ED2064-B	Trace Hardness Titrant, 60 mL
ED2070-B	Hardness Titrant High, 60 mL
HA7407-B	Hardness Buffer Solution, 60 mL
HA7475-H	Hardness Indicator Powder, 10 g
VL-1005-V	Vial, 10-50 mL

**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. Additional Hardness Buffer may be necessary to view a clean endpoint.

### SAFETY TIPS:



Wear  
Gloves



Use Eye  
Protection



Read  
SDS

### TESTING TIPS:



Collect  
Accurate  
Sample



Hold  
Bottles  
Vertically

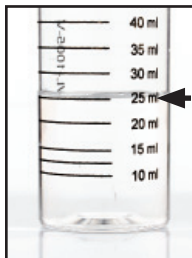


Ensure  
Proper  
Lighting

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

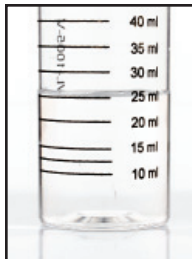


**1** Rinse vial three times with sample to be tested. **Fill vial to 25 mL.**



STEP 1

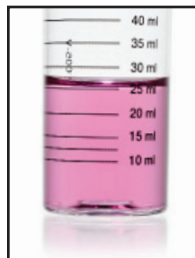
**2** Add 8 drops of **Hardness Buffer** (HA7407) and swirl to mix.



STEP 2

**3** Add 1 scoop of **Hardness Indicator Powder** (HA7475) and swirl to mix.

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

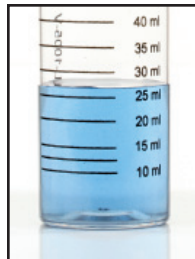


STEP 3

**4** Add **Hardness Titrant** one drop at a time while swirling. Count the number of drops until the sample color changes from red to blue.

Trace Hardness Titrant (ED2064)  
 $\# \text{ drops} \times 0.5 = \text{ppm as CaCO}_3$

Hardness Titrant High (ED2070)  
 $\# \text{ drops} \times 10 = \text{ppm as CaCO}_3$



STEP 4