



# Hardness Test Kit

## 5-EP MG/L (145401)

DOC326.97.00111

### Test preparation

**CAUTION:** Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

- Hold the dropper vertically above the sample. Do not let the dropper touch the bottle during the titration.
- Rinse the tubes and bottles with sample before the test. Rinse the tubes and bottles with deionized water after the test.
- To record the test result as gpg (grains per gallon), divide the mg/L test result by 17.1
- To verify the test accuracy, use a standard solution as the sample.

### Test procedure—Hardness (0–400 mg/L as CaCO<sub>3</sub>)



1. Fill the measuring tube with sample.
2. Pour the sample into the mixing bottle.
3. Add one UniVer 3 Hardness Reagent Powder Pillow. Turn the bottle left and right to mix. A pink color develops.
4. Add the Hardness 3 Titrant Solution by drops. Mix after each drop. Count the drops until the color changes from pink to blue.
5. Multiply the total number of drops by 20 to get the result in mg/L.

### Replacement items

**NOTE:** Product and Article numbers may vary for some selling regions. Contact the appropriate distributor or refer to the company website for contact information.

Description	Unit	Item no.
UniVer® 3 Hardness Reagent Powder Pillows	100/pkg	96299
EDTA Standard Solution, 0.035 N	100 mL MDB	2349932
Bottle, square, glass, 29 mL	6/pkg	43906
Measuring tube, plastic, 5.83 mL	each	43800

### Optional items

Description	Unit	Item no.
Standard solution, hardness, 340 mg/L (20 gpg) as CaCO <sub>3</sub> and iron (2 mg/L)	500 mL	47949
Water, deionized	500 mL	27249

