

**REF** K100-0102 Water Hardness Test Strips

**Instructions for Use** 

### **Indications for Use**

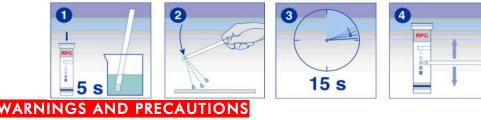
K100-0102 Water Hardness Test Strips (50 per container), are for the semi-quantitative analysis of low water hardness, after the softening of water that is used (for example) to feed the reverse osmosis system. Water hardness means the content of calcium and magnesium ions in the water, which is expressed in grains per gallon (gpg), parts per million (ppm, mg/l), calcium carbonate CaCO<sub>3</sub>, and German degree of hardness (dGH, °dH). Color gradations from 0.3 to 7 gpg (5-120 ppm), and 0.3 to 6.7 °dH. Note: The zero color is for reference only. When a test reading is at zero color, the hardness of the water is below the sensitivity of the test to detect hardness.

### **Test Procedure**

- 1. Verify the test strips have not expired.
- 2. Remove only as many test strips as are required. Close the container immediately after removing a strip. Do not touch the test pad at the end of the strip.

IMPORTANT

- 3. Dip the test strip for 5 seconds into the test solution (Fig. 1).
- 4. <u>Gently</u> shake off excess liquid (Fig. 2).
- 5. After a 15 second wait period (Fig. 3), compare the test pad color with the color scale on the K100-0102 container to determine water hardness level in the sample. Estimate results if the color on the test pad falls between two color blocks. (Fig. 4).



#### Storage and Handling 59°F (15°C)

- Store at temperatures out of direct sunlight between 59°F 86°F (15°C 30°C).
- Do not use test strips after the expiration date. <u>The expiration date is the last day of the month printed on</u> the container.
- The lot number and expiration date are printed on the container label. (year/month/day).
- Close container immediately after removing a strip.
- Do not touch the test pad at the end of the strip.
- Do not allow the test strip to come in contact with liquids or work surfaces that may be contaminated with potentially interfering substances.
- Do not leave the test strips in areas exposed to vapors of any kind.

~86°F (30°C)

- Keep all unused test strips in the original bottle.
- Do not remove the desiccant from cap/lid.
- The test strip container stopper contains a non-toxic drying agent. If swallowed, drink plenty of water.

# Interferences

K100-0102 test strips will not be adversely affected by the presence of up to 50mg/l chlorine or 500 mg/l hydrogen peroxide. The test strips may be used to test the hardness of drinking water pre or post softener, or the feed water to RO systems. Inaccurate results may occur in other solutions.

# **Chemical Properties of the Test**

Determining the water hardness is based on the complexing reaction between calcium and magnesium ions and ethylenediaminetetraacetic acid (EDTA), disodium salt. Note: OSHA classifies test strips as an article not requiring a Safety Data Sheet (SDS).

## **Quality Control**

RPC performs an independent quality control test on each lot number of test strips (Certi-Chek<sup>™</sup> Field Verification Program). RPC includes a certificate of conformance with each shipment. Certificates of conformance are also available upon request and/or can be downloaded at www.rpc-rabrenco.com.

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