

WATER HARDNESS TEST STRIPS INSTRUCTIONS FOR USE P/N K100-0102 and Kit Number 5129 (6 each K100-0102)

DESCRIPTION

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) or ppm (mg/l) calcium carbonate (CaCO₃). The measuring range is 0.3 to 7 grains per gallon (5-120 ppm). Note: The zero color is for color reference only. When a test reading is at the zero color, the hardness of the water is below the sensitivity of the test strip to detect hardness.

⚠️ WARNINGS & PRECAUTIONS

- Keep all unused test strips in the original bottle.
- Do not remove desiccant dryer from cap/lid.
- Replace cap immediately/tightly after removing a strip.
- Do not use test strips from an opened or unopened bottle after expiration date printed on the container label (year/month/day).
- Do not touch the indicator pad.
- Do not allow the test strip to come in contact with liquids or with work surfaces that may be contaminated with potentially interfering substances.
- Do not leave test strips in areas exposed to vapors of any kind.
- The test strip container stopper contains a non-toxic drying agent. If swallowed, drink plenty of water.

STORAGE:

Keep test strips dry and away from direct sunlight. Store test strip container in a cool and dry place between 15 °C and 30 °C. If stored correctly, the opened or unopened test strips may be used until the expiration date shown on the container label. Dispose of used test strips as domestic waste.

INTERFERENCES:

The test will not be adversely affected by the presence of up to 50 mg/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. In other solutions, inaccurate results may occur. **Water to be tested should be at room temperature.**

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 tests 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™ Field Verification Program). A letter from RPC certifying the test results is available upon request and/or can be downloaded from the RPC Web site at www.rpc-rabrenco.com. Proper use procedures, including storage and handling, must be documented to ensure accurate test results.

⚠️ IMPORTANT

Procedure for Testing Hardness in Water

1. Remove only the required number of test strips from the container and immediately cap the container securely. Do not touch the test pad with your fingers.
2. Insert the test strip into the test solution for 5 seconds. See figure 1 below.
3. *Gently* shake off any excess liquid. See figure 2 below.
4. Wait 15 seconds. See figure 3 below.
5. Compare the test pad color with the color scale on the container (see figure 4 below). Take the value which matches closest with the test pad. The reaction color of the test pad may change after the value has been taken. In order to achieve a correct result, it is therefore critical to evaluate the color within the prescribed time as listed in steps 2 and 4 above.

