



## E-Z Chek® Chlorine & Chloramines Test Strip - Application Note

### Introduction

Testing to determine levels of chloramines and/or free chlorine in water used for dialysis and the rinse water of dialysis machines is required by the Association for the Advancement of Medical Instrumentation (AAMI), water treatment system manufacturers and dialysis machine manufacturers. The AAMI/ANSI National Standard for Hemodialysis Systems (RD62 - August, 2001) lists the maximum allowable level for these contaminants. Water treatment system manufacturers' and dialysis machine manufacturers' instructions for use typically list the procedures required prior to collecting a test sample and indicate where to collect the sample. The following convenient table indicates which RPC test strips should be used for the applications shown in the table. Old testing methods that are replaced by use of the RPC test strips are also shown in the table.

Application:	RPC # K100-0101B	RPC # K100-0106	Replaces:
Test for residual bleach in dialysis machine rinse water.	X		Hach or LaMotte DPD Chlorine Tests (Free or Total)
Test for free chlorine in dialysis water system (between carbons).	X		Hach or LaMotte DPD Chlorine Tests (Free or Total)
Test for chloramines in dialysis water system (between carbons).		X	Hach or LaMotte DPD Total Chlorine Tests

### Using the K100-0101B E-Z Chek® Free Chlorine Test Strips

When using a K100-0101B test strip to test the rinse water of a dialysis machine that has been bleach cleaned, continue rinsing until the residual level of chlorine shown on the strip color pad is below the level specified by the machine manufacturer, or below the AAMI free chlorine maximum of 0.5 ppm (pad reads zero), if not specified by the machine manufacturer.

When using the strip to test the dialysis water system for free chlorine, the color pad should show no sign of color change (zero ppm). Typically, the water sample is taken from a sample port located between the worker and polisher carbon tanks. **The K100-0101B test strips should not be used to test for chloramines...use the K100-0106 test strip (see below).**

### Using the K100-0106 E-Z Chek® Total Chlorine & Chloramines Sensitive Test Strips

A water system sample should also be tested for chloramines using a K100-0106 test strip (sensitive to less than 0.1 ppm - the AAMI maximum allowable level). The color pad should show no sign of color change (zero ppm). Typically, the water sample is taken from a sample port located between the worker and polisher carbon tanks.

Be sure to follow all instructions for use that come with both strip types. Immediately replace the cap tightly on the container after removing each test strip. Store at room temperature away from heat. Check the container for the expiration date before using the strips. Use only non-expired strips.