

# PRODUCT PROFILE



## GUARDIAN™ PERACETIC ACID TEST STRIPS

### WHAT does this product do?

Serim® GUARDIAN Peracetic Acid Test Strips indicate the potency or concentration of peracetic acid present in peracetic acid/hydrogen peroxide-based disinfectants used to disinfect dialyzers. Dialyzers are generally filled with peracetic acid solutions with a working concentration of 1000 ppm to 1500 ppm.<sup>1</sup>

### WHY should I use this product?

Inadequate disinfection can result if improper concentration of disinfectant is used. The presence of germicide must be ensured through procedural controls, ideally verified in every dialyzer prior to rinsing.<sup>2</sup> Testing for the proper concentration of disinfectant ensures that the disinfectant has been properly diluted and is still present at an adequate concentration.<sup>3</sup>

### WHERE do I use this product?

Test a sample of peracetic acid/hydrogen peroxide disinfectant obtained from the port of the dialyzer.



### WHEN do I use this product?

Test each dialyzer prior to use for the presence of disinfectant. Daily verification of the concentration of disinfectant in the batch solution is necessary as are periodic spot-checks of dialyzers.<sup>2</sup>

### HOW to use this product

Serim GUARDIAN Peracetic Acid Test Strips are supplied in ready-to-use form. When placed in contact with the sample according to the directions for use (see below), the indicator pad changes color relative to the concentration of peracetic acid present.

### Ordering Information

Serim GUARDIAN Peracetic Acid Test Strips:

- Product Code 5106 are sold in kits of 6 bottles of 100 test strips

### Related Products

Serim GUARDIAN Residual Peroxide Test Strips (Product Code 5105) indicate that the peracetic acid/peroxide disinfectant concentration has been reduced to safe levels after rinsing.

Test Method	Immersion
Sample	Prior to rinsing the dialyzer, use the port cap to collect a sample of disinfectant sufficient to completely immerse the indicator pad of the test strip.
Test Strip Technique	Immerse indicator pad into sample for 1 second, remove and immediately shake excess liquid from strip.
Results	Observe indicator pad <b>at exactly 10 seconds</b> after dipping to interpret results: PASS . the indicator pad is predominantly or entirely gray/blue/black or brown FAIL . the indicator pad is predominantly or entirely white

Store bottles of Serim GUARDIAN Peracetic Acid Test Strips at temperatures between 15°- 30°C (59°- 86°F).  
The lot number and expiration date are printed on the bottom of each bottle.

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Features	Benefits
Simple Dip & Read procedure	~ Quick and reliable method to determine that the disinfectant remains at or above the minimum effective concentration
Simple to interpret reaction: ~ Distinct dark brown to blue/black indicator pad is a PASS (PAA concentration $\geq 800$ ppm) ~ White indicator pad indicates the disinfectant is a FAIL (PAA concentration $\leq 400$ ppm)	~ Can be used with the most common brands of peracetic acid dialyzer disinfectants ~ Accurate and consistent results with less variation between readers
Ready-to-use test	~ No preparation or mixing of reagents ~ No glass vials or sharps needed ~ No need to dilute samples to test <sup>4</sup>
Quick, qualitative results in 10 seconds	~ Allows quick initiation of dialysis procedure
Labeled for dialysis use <sup>3</sup>	~ No need to qualify an off-label test for dialysis use ~ No need to monitor changes in product performance from lot-to-lot
Each bottle clearly labeled with: ~ Lot number ~ Expiration date	~ Traceability of product from manufacturing to final user ~ Leaves no doubt as to the age or integrity of the product

### References:

1. Personal communication . working concentration information available from peracetic acid manufacturers
2. Handbook of Dialysis, Third Edition, JT Daugirdas, PG Blake and TS Ing, pg 172. Lippincott, Williams and Wilkins
3. *Proper mechanisms for assuring disinfectant concentrations for use in hemodialysis*. Nephrol News Issues. 1999 Jun;13(6):18, 23, 27. Arduino MJ.
4. ReNews, a Publication on Dialyzer Reprocessing, Volume 3, Number 1, Spring/Summer 1995, pg 6. Renal Systems, Division of Minntech Corporation

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