PRODUCT PROFILE

Series MONITOR[™] for CHLORINE 0-300 ppm Product Codes 5148, 5148Q

WHAT does this product do?

Serim[®] MONITOR[™] for Chlorine 0-300 ppm strips measure free chlorine. The test yields a semiquantitative indication that chlorinebased sanitizers are at the appropriate concentration required for use in sanitizing food and food processing equipment.

WHY should I use this product?

The maximum allowable level for norinse applications is 200 ppm available free chlorine, but recommended usage levels vary.¹

Using a chlorine concentration that is too low may not thoroughly sanitize equipment or utensils. However using an unnecessarily high concentration of chlorine "may apply unnecessary, undesirable, potentially unhealthful or unlawful levels of sanitizer. Also, organic matter depletes the concentration of chlorine available thus it needs to be monitored periodically.

WHERE do I use this product?

Review applicable regulations or the equipment manufacturer's instructions to determine the appropriate sampling point. Periodic samples may be required to determine that the chlorine potency remains at the desired level.

HOW to use this product?

Serim MONITOR strips are supplied in ready-to-use form. When testing a sanitizing solution according to the directions for use (see below), the indicator pad changes color relative to the chlorine concentration. The strips provide a semi-quantitative method to estimate chlorine concentrations between 0 and 300 ppm with color blocks at 25, 50, 100, 200 and <u>></u>300 ppm. The 5148Q test notes the target concentration range and helps identify when solutions are out of effective range.

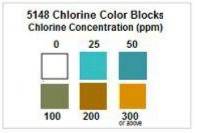
Ordering Information

Serim MONITOR for Chlorine 0-300 ppm

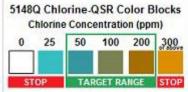
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1 bottle of 100 strips





Diagrams are for illustration purposes only Always use the color blocks on the actual bottle label to interpret results.



Test Method	Immersion
Test Strip Technique	Immerse indicator pad in solution and remove immediately. Shake strip firmly to remove excess sample.
Results	Between 15 and 30 seconds after removing strip from sample, compare the <i>color at the center</i> of the indicator pad to color chart on the bottle label.

Store bottles of Serim MONITOR 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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SERIM MONITOR for CHLORINE 0-300 ppm

Features	Benefits		
Designed for use in the food processing industry	 Color blocks at levels significant to the food processing industry 		
Ready-to-use strips, simple procedure	 No calculations or "drop counting" needed No preparation or mixing of reagents 		
Quick, semi-quantitative results in 15 to 30 seconds.	 Simple, quick and reliable method 		
Simple to interpret color blocks	 Accurate and consistent results minimize variation between readers Color of indicator pad is directly compared to color blocks on bottle label 		
QSR specialty label	 Label notes optimum range of chlorine solutions for the food industry 		
Color of indicator pad is stable at high chlorine concentrations	 Indicator pad does not bleach out if chlorine concentration is greater than 300 ppm 		
Test results not affected by common water constituents	 Confidence that any positive result is due to chlorine or other oxidants 		
Consistent color reactions	 Results not affected by aging during the shelf life of the product 		
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. Basic Elements of Equipment Cleaning and Sanitizing in Food Processing and Handling Operations. FS14 Food Science and Human Nutrition Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. EDIS website at http://edis.ifas.ufl.edu.
- 2. Regulations of the Food & Drug Administration, Book 21 Code of Federal Regulations (21 CFR 173.315 and 21 CFR 178 Subpart B)
- U.S. Department of Agriculture Regulations on Chlorine or Chlorine Compounds, Book 9 (9CFR Part 303 Exemptions; 9 CFR.303.1.(e) (1) (i) (Meat); 9 CFR 381.10 (e) (3) (I) (E) (Poultry); 9 CFR 310.9;9 CFR 381.151 (b); 9 CFR 318.14; 9 CFR Part 318 Subpart A - General (9 CFR 318.17 and 318.23); 9 CFR 381 Subpart K
- 4. Regulations of the Environmental Protection Agency (EPA) on the Use of Chlorine or Chlorine Compounds in the Food Industry, Book 40 Code of Federal Regulations (40 CFR Part 180 and 40 CFR 141 and 142)



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