# PRODUCT PROFILE



## MONITOR<sup>™</sup> for CHLORINE 100-750 ppm Product Code 5161

## WHAT does this product do?

Serim<sup>®</sup> MONITORï for Chlorine 100-750 ppm strips measure free chlorine. The test gives a semiquantitative indication that chlorinebased sanitizers or disinfectants have the appropriate concentration of free chlorine required for use on hard surface areas and equipment in numerous environments such as food & beverage processing facilities, food service facilities, medical/dental clinics, child or adult daycare facilities and numerous agricultural industries (dairies, cattle-raising facilities, swine buildings and poultry houses).

## WHY should I use this product?

In food processing, the concentration of chlorine can range from 1-ppm to 5000-ppm, depending on the type of food being processed (meat, poultry, seafood, dairy, fruits, vegetables, eggs, etc...), the processing stage and federal (USDA<sup>1</sup>, EPA<sup>2</sup>, FDA<sup>3</sup>) or state regulations.

The chlorine concentration for sanitizing food contact surfaces ranges from 50. 200 ppm.

For disinfection of surfaces or items contaminated by body fluids, the chlorine concentration ranges from 500. 1000 ppm.

Using a free chlorine concentration that is too low may not thoroughly sanitize the surface. However, using an unnecessarily high concentration of chlorine may leave an unhealthy residue. The goal is to develop cleaning/sanitizing methods that effectively rid surfaces of soil and microorganisms without over using chlorine.

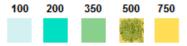
### WHERE do I use this product?

Serim MONITOR strips allow testing at various point-of-use locations in food processing, institutional, and agricultural areas.

Review applicable regulations and equipment manufacturer**\$** recommendation to determine appropriate testing requirements.



#### Chlorine Concentration (ppm)



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

## **Ordering Information**

Serim MONITOR for Chlorine 100-750 ppm

Product Code 51611 bottle of 100 strips

Test Method	Immersion
Test Strip Technique	Immerse indicator pad in sample for a full two (2) seconds and remove. Shake strip firmly to remove excess sample.
Results	After 90 seconds, compare the <b>color at the center</b> 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 100-750 ppm		
Features	Benefits	
Ready-to-use strips, simple procedure	<ul><li>No calculations or % drop counting+needed</li><li>No preparation or mixing of reagents</li></ul>	
Quick, semi-quantitative results in 90 seconds.	<sup>7</sup> Simple, quick and reliable method	
Simple to interpret color blocks	<ul> <li>Accurate and consistent results minimize variation between readers</li> <li>Color of indicator pad is directly compared to color blocks on bottle label</li> <li>Color blocks at levels significant for sanitizing process</li> </ul>	
Consistent color reactions	"Results not affected by aging during the shelf life of the product	
Each bottle clearly labeled with:	" Traceability of product from manufacturing to final user " Leaves no doubt as to the age or integrity of the product	

#### **References:**

- 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) (l) (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
- 2. 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)
- 3. Regulations of the Food & Drug Administration, Book 21 Code of Federal Regulations (21 CFR 173.315 and 21 CFR 178 Subpart B)
- 4. Guidelines for the Use of Sanitizers and Disinfectants in Child Care Facilities. CPD Guideline 350 rev E, Colorado department of Public Health and Environment.



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