

PRODUCT PROFILE



MONITOR™ for CHLORINE 100-750 ppm

Product Code 5161

WHAT does this product do?

Serim® MONITOR™ for Chlorine 100-750 ppm strips measure free chlorine. This test gives a semi-quantitative indication that chlorine-based sanitizers or disinfectants have the appropriate concentration of free chlorine required for use on hard surface areas and equipment.

Chlorine sanitizing solutions are widely used in numerous environments including food & beverage processing facilities, food service facilities, medical/dental clinics, child or adult daycare facilities and many 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 (USDA¹, EPA², FDA³) or state Regulations⁴.

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 will not thoroughly sanitize the surface. Using an unnecessarily high concentration of chlorine will leave an unhealthy residue. The goal is to develop the most effective cleaning/sanitizing methods to rid surfaces of soil and microorganisms without over using chlorine.

WHERE do I use this product?

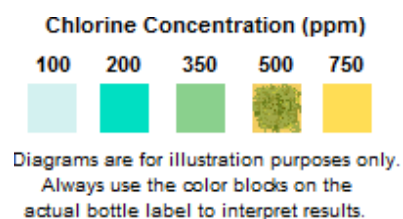
Serim MONITOR strips provide fast, point-of-use testing at various locations in food processing, institutional, agricultural areas, and medical facilities. This test has been recommended based on accuracy, precision, price and ease of use (Figure 2, Table 2)⁵.

Review applicable regulations and equipment manufacturer's recommendation to determine appropriate testing requirements.

Ordering Information

Serim MONITOR for Chlorine 100-750 ppm

- Product Code 5161
1 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 color at the center 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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Features	Benefits
Ready-to-use strips, simple procedure	<ul style="list-style-type: none"> No calculations or “drop counting” needed No preparation or mixing of reagents Recommended where precise, rapid, inexpensive test requiring minimal training is needed (Figure 2, Table 2) ⁵
Quick, semi-quantitative results in 90 seconds.	<ul style="list-style-type: none"> Simple, quick and reliable method
Simple to interpret color blocks	<ul style="list-style-type: none"> Accurate and consistent results minimize variation between readers Color of indicator pad is directly compared to color blocks on bottle label Color blocks at levels significant for sanitizing process
Consistent color reactions	<ul style="list-style-type: none"> Results not affected by aging during the shelf life of the product
Each bottle clearly labeled with: <ul style="list-style-type: none"> Lot number Expiration date 	<ul style="list-style-type: none"> Traceability of product from manufacturing to final user Leaves no doubt as to the age or integrity of the product

References:

1. 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
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.
5. Wells E, et al. (2016, May 31) Accuracy, Precision, Ease-Of-Use, and Cost of Methods to Test Ebola-Relevant Chlorine Solution. *PLOS ONE*. Retrieved from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0152442>

Published Studies and Research Articles

Wells E, et al. (2016, May 31) Accuracy, Precision, Ease-Of-Use, and Cost of Methods to Test Ebola-Relevant Chlorine Solution. *PLOS ONE*. Retrieved from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0152442>



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