

Cleaning Innovations That Matter.

For use in a variety of food service operations including meat/poultry plants, restaurants, supermarkets, butcher shops, delicatessens and other kitchens.

Time Kill Study

This study is designed to show Betco's #717 E2 Antibacterial Foaming Skin Cleanser rate of kill of a test substance after inoculation with a test organism. Results are expressed in percent reduction of the test organism Data listed below is based on a 15 seconds exposure time.

RESULTS:

| Microorganism | ATCC Number | Test Population Control (CFU/ml) | Number of Survivors (CFU/ml) | % Reduction |
|---|----------------|--|---------------------------------|-------------|
| Klebsiella pneumoniae | 4352 | 4.1 X 10 ⁶ | 5 | 99.9999 |
| Listeria monocytogenes | 19117 | 9.3 X 10 ⁶ | 8.9 X 10 ² | >99.99 |
| Pseudomonas aeruginosa | 15442 | 1.48 X 10 ⁶ | <5 | 99.999 |
| Salmonella choleraesius serotype enteritidis | 4931 | 1.48 X 10 ⁵ | 3 X 10 ¹ | >99.99 |
| Shigella dysenteriae | 13313 | 1.26 X 10 ⁶ | 3.1 X 10 ² | >99.9 |

Chlorine Equivalency Test

This study is designed to determine the available chlorine germicidal equivalent concentration of the #717 E2 Antibacterial Foaming Skin Cleanser as compared to 200, 100 and 50 ppm available chlorine in the NaOCI standard controls.

Initial Suspension Population

Staphylococcus aureus ATCC 6538 1.9 X 10⁸ CFU/ml* *Colony forming units per ml of test mixture Salmonella typhi ATCC 6539 1.2 X 10⁸ CFU/ml

| Test Organism | Test Substance | Concentration | SubCulture Series | | | | | | | | | |
|---------------|-------------------|---------------|-------------------|---|---|---|---|---|---|---|---|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| S. aureus | NaOCI | | | | | | | | | | | |
| | Control | 200 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + |
| | | 100 ppm | 0 | 0 | 0 | 0 | 0 | + | + | + | + | + |
| | | 50 ppm | 0 | + | + | + | + | + | + | + | + | + |
| | #717 E2 | RTU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S. typhi | NaOCI | | | | | | | | | | | |
| | Control | 200 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 | + | + | + |
| | | 100 ppm | 0 | 0 | 0 | 0 | + | + | + | + | + | + |
| | | 50 ppm | 0 | + | + | + | + | + | + | + | + | + |
| | #717 E2 | RTU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

+ = Growth of Organism

0 = No Growth of Organism

The subcultures of positive broths (tubes showing growth) demonstrated pure cultures of test organism.

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