

Microbiological Testing of the Steripen with the Steripen Pre-Filter Fixture

Procedure:

E. coli ATCC 25922 was grown overnight (overnight culture) to a concentration of approximately 1.5×10^8 .

One liter of tap water was spiked with *E. coli* to a desired final concentration.

The Steripen Pre-Filter fixture and the Steripen were attached to the Nalgene bottle containing the spiked water.

The spiked water was treated with the Steripen for the specified 90 second treatment.

Treatment was in accordance with SteriPEN and Pre-Filter user's instructions.

The treated water samples (as well as the untreated control) were then diluted, plated on appropriate growth media (Trypticase Soy Agar) and the concentration of *E.coli* determined using the plate count method.

Percent kill was determined by comparing the concentration of *E. coli* in the untreated control to that in the treated samples.

Each count was done in triplicate.

Results:

Initial concentration of <i>E. coli</i>	Concentration after treatment	Log reduction/%kill
1.5×10^7	$< 1 \times 10^1$	$>6 \text{ log}/99.9999\%$

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Anne G. Hanson

Department of Microbiology, Molecular Biology and Biochemistry

University of Maine

Orono, Maine 04474