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Certificate of Analysis

Client: Nature's Rite, LLC

Contact: Steven Frank

Project: MBC Screening against *Vibrio cholerae*

EMSL NO: 151401963

Start date: May 1, 2014

Report Date: May 8, 2014

Experimental Summary:

An MBC screening was performed against *Vibrio cholerae* using the client's antimicrobial product and test protocol. Testing was performed in triplicate using 5-milliliter (mL) portions of client's product and 5-mL portions of sterile saline serving as positive controls. (The method was modified to use sterile saline instead of DIW because the test organism did not survive in the controls using DIW.) Each portion was inoculated with 100 microliters (uL) of a 1×10^8 suspension of *V. cholerae* and incubated for one hour at 35-37°C. Plate counts were performed after one hour from test and control tubes.

Experimental Results:

Tube:	Concentration at one hour (CFU/mL)	Log	Log Reduction	Percent Reduction
Test-1	<10	<1	>5.4	>99.999%
Test-2	<10	<1		
Test-3	<10	<1		
Control-1	2.8×10^6	6.4		
Control-2	3.3×10^6	6.5		
Control-3	2.1×10^6	6.3		
Control average	2.7×10^6	6.4		

CFU: Colony forming Units

Conclusions/Observations:

The test product provided greater than 99.999% reduction of the test bacteria at one hour.

Respectfully submitted by:

Melanie Rech

Melanie Rech, Laboratory Director