

# Antimicrobial Preservative Effectiveness Test/ Category 1C

Conducted by Bioscreen Testing Service, Inc. 3892 Del Amo Boulevard, Ste, G-5, Torrance, CA

Report Date: 08/04/99 Project # 83454  
Date received: 06/25/99 Reference# 738-135  
Date test completed: 08/04/99

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## What the test means:

The Preservative Effectiveness Test demonstrates the effectiveness of a substance—when used as a preservative or additive— to stop the growth of such pathogenic organisms as *E. coli*, *Aspergillus niger*, *Candida albicans*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*.

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**Sample Description:** ACC#: 83454

**Sample:** Cellfood® **Test Performed:** Pres/Effect. Test **BTS Method:** M101.R2 **Reference:** USP 23, 8th sup. **Lot:** ROM508 exp 2/2009

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## Sample preparation:

The following organisms— *Aspergillus niger*, *Candida albicans*, *Escherichia coli*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus*— are used to challenge the specimen for twenty-eight (28) days. Microorganism survival is monitored at fourteen (14) and twenty-eight (28) day intervals.

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## Results:

### Table Summary

Micro Organism	Initial Inoculum/gm	Colony forming units/ gm		Log reduction	
		14 days	28 days	14 days	28 days
A. niger	4.8 x 10 <sup>5</sup>	<10	<10	4.7	4.7
B. albicans	3.2 x 10 <sup>5</sup>	<10	<10	4.5	4.5
E. coli	1.2 x 10 <sup>5</sup>	<10	<10	5.0	0.0
P. aeruginosa	6.7 x 10 <sup>5</sup>	<10	<10	4.8	0.0
S. aureus	7.3 x 10 <sup>5</sup>	<10	<10	4.9	0.0

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## Interpretation:

For Category 1C Products, the preservative is effective in the product examined if:

- Not less than or equal to 1.0 log reduction from the initial count at 14 days, and no increase\* from the 14 day count at 28 days, is observed in the bacterial samples.
- No increase\* from the initial calculated count at 14 and 28 days is observed in the yeast and mold samples.;

\*No increase is defined as not more than 0.5 log<sub>10</sub> unit higher than the previous value measured.

## Conclusion:

The above test results meet the current USP criteria for the Antimicrobial Preservative Effectiveness Test.

Signed: Eugene Aquisap, B.S. Microbiologist