



ANALYSIS REPORT

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Client: Margaret Macbeth	Lab No: 843595	SPV1
Contact: Margaret Macbeth 4545 Karamea Highway RD 3 KARAMEA 7893	Date Registered: 02-Dec-2010	
	Date Reported: 02-Dec-2010	
	Quote No:	
	Order No: 14497	
	Client Reference: Margaret McBeth Challenge	
	Submitted By: Margaret Macbeth	

Analyst's Comments

Appendix No.1 - True Blue Hand Sanitiser #T7 Challenge Test

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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True Blue Hand Sanitiser Efficacy Trial

Barbara Müller
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The method employed to carry out this testing was based on AOAC Official Method 960.09 (Germicidal and Detergent Sanitizing Action of Disinfectants).

The neutraliser buffer used was DE Neutralising Broth.

The organisms used were:

- *Escherichia coli*
- *Staphylococcus aureus*
- *Pseudomonas aeruginosa*
- *Candida albicans*

Numeric counts were performed after one minute and five minute contact times.

A numeric count of the inoculant solutions was carried out before any contact times to ascertain the theoretical level of organisms inoculated into each sample. This is shown in Table 1.

Table 1:

Organism	cfu per mL of inoculum	Theoretical cfu per mL/g of Product
<i>Escherichia coli</i>	880,000,000	8,800,000
<i>Staphylococcus aureus</i>	550,000,000	5,500,000
<i>Pseudomonas aeruginosa</i>	1,600,000,000	16,000,000
<i>Candida albicans</i>	56,000,000	560,000

Results of the trial can be seen in the tables below.

Escherichia coli

Contact time	Count before contact	LOG ₁₀	Count after contact	LOG ₁₀	LOG ₁₀ decrease	% Decrease
1 minute	8,800,000	6.94	<100	<2	>4.94	>99.999
5 minutes	8,800,000	6.94	<100	<2	>4.94	>99.999

Staphylococcus aureus

Contact time	Count before contact	LOG ₁₀	Count after contact	LOG ₁₀	LOG ₁₀ decrease	% Decrease
1 minute	5,500,000	6.74	1,800,000	6.26	0.48	67.27
5 minutes	5,500,000	6.74	300	2.48	4.26	99.995

Pseudomonas aeruginosa

Contact time	Count before contact	LOG ₁₀	Count after contact	LOG ₁₀	LOG ₁₀ decrease	% Decrease
1 minute	16,000,000	7.20	<100	<2	>5.20	>99.999
5 minutes	16,000,000	7.20	<100	<2	>5.20	>99.999

Candida albicans

Contact time	Count before contact	LOG ₁₀	Count after contact	LOG ₁₀	LOG ₁₀ decrease	% Decrease
1 minute	560,000	5.75	120,000	5.08	0.67	78.57
5 minutes	560,000	5.75	<100	<2	>3.75	99.98

The sanitiser shows good effectiveness against Gram negative organisms (*E.coli* and *Pseudomonas*) after one minute exposure time.

Effectiveness against Gram positive organism (*Staphylococcus*) and yeast (*Candida*) is somewhat less effective, with reasonable effectiveness only visible after 5 minutes.