

# Analytical MicroLabs

## Industrial Microbiologists

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### Citrofresh Bacterial testing record sheet

**Certificate number:** 010706  
**Batch number:** 361434  
**Production date:** February 2006  
**Date or period of testing:** 15/03/06- 25/03/06

#### Chemical characteristic:

	Superconcentrate	14P	Hospital Grade (10%)
pH	1.3	2.5	3.1
Specific Gravity	1210	1010	1005

#### Microbiological characteristics:

**Organism tested:**

1. Pseudomonas aeruginosa	NCTC 6749
2. Proteus vulgaris	NCTC 4635
3. Escherichia coli	NCTC 8196
4. Staphylococcus aureus	NCTC 4163

**MIC by tube dilution:**

Pseudomonas aeruginosa	3.12 % (v/v)
Proteus vulgaris	3.12 % (v/v)
Escherichia coli	3.12 % (v/v)
Staphylococcus aureus	1.65 % (v/v)

**MBC by tube dilution:**

Pseudomonas aeruginosa	6.25 % (v/v)
Proteus vulgaris	6.25 % (v/v)
Escherichia coli	6.25 % (v/v)
Staphylococcus aureus	1.65 % (v/v)

Tube number	1	2	3	4	5	6	7	8	9	10	
Concentration of Citrofresh % (v/v)	100	50	25	12.5	6.25	3.125	1.65	0.8	0.4	Neg	
<b>MIC</b> Organism 1. Organism 2. Organism 3. Organism 4.	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Growth Growth Growth Ng	Growth Growth Growth Growth	Growth Growth Growth Growth	Ng Ng Ng Ng	
<b>MBC</b> Organism 1. Organism 2. Organism 3. Organism 4.	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Ng Ng Ng Ng	Growth Growth Growth Ng	Growth Growth Growth Ng	Growth Growth Growth Growth	Growth Growth Growth Growth	Ng Ng Ng Ng	

**Initial inoculum concentration:**  $8 \times 10^8$  -  $9 \times 10^8$  orgs/ml

**Incubation temperature and time:** 37 degrees Celsius for 24 hrs

**Kelsey- Maurer Capacity test (TGA Disinfectant test, Appendix 54, 545A, TGA Protocol)**

Concentration of Citrofresh	4%		8%		10%		12%	
Time of challenge	8 min.	18 min.	8 min.	18 min.	8 min.	18 min.	8 min.	18 min.
Organism tested								
Pseudomonas aeruginosa NCTC 6749	5/5 Growth	4/5 Growth	3/5 Growth	3/5 Growth	1/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth
Proteus vulgaris NCTC 4635	4/5 Growth	4/5 Growth	3/5 Growth	2/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth
Escherichia coli NCTC 8196	5/5 Growth	4/5 Growth	3/5 Growth	2/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth
Staphylococcus aureus NCTC 4163	1/5 Growth	1/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth

(0, 1, 2, 3, 4, 5/5 growth represent the positive broth out of 5 Nutrient broth)

**Initial inoculum concentration:**  $8 \times 10^8$  -  $9 \times 10^8$  orgs/ml

**Incubation temperature and time:** 37 degrees Celsius for 48 hrs

**Condition:** dirty – 5% sterile yeast

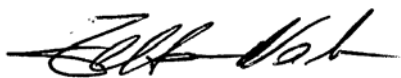
**Diluent:** Standard Hard Water

<b>Effective concentration:</b>	<b>Pseudomonas aeruginosa</b>	<b>10%</b>
	<b>Proteus vulgaris</b>	<b>10%</b>
	<b>Escherichia coli</b>	<b>10%</b>
	<b>Staphylococcus aureus</b>	<b>4%</b>

Please note: The above recommended usage concentrations of Citrofresh are based on an Initial inoculum concentration of  $8 \times 10^8 - 9 \times 10^8$  orgs/ml. Lower microbial counts would not require such high concentrations of Citrofresh in order to be effective against them.

<b>Controls:</b>	<b>1. Recovery Broth contamination</b>	<b>No growth</b>
	<b>2. Disinfectant contamination</b>	<b>No growth</b>
	<b>3. Fertility test</b>	<b>Growth</b>
	<b>4. Inactivator Efficacy</b>	<b>Growth</b>

**Authorised by:**



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