Analytical MicroLabs Industrial Microbiologists

14 Separation Street, North Geelong VIC 3215 Phone: (03) 52404910 Fax: (03) 5272 1322

ABN 55 167 987 554

Citrofresh Bacterial testing record sheet

Certificate number: 011205 Batch number: 379516

Production date: November 2005

Date or period of testing: 08/11/2005 - 12/11/2005

Organism tested: 1. Pseudomonas aeruginosa NCTC 6749

2. Proteus vulgaris NCTC 4635 3. Escherichia coli NCTC 8196 4. Staphylococcus aureus NCTC 4163

NATA Accredited Laboratory: 14917

MIC by tube dilution: Pseudomonas aeruginosa 8%

Proteus vulgaris 4% Escherichia coli 8% Staphylococcus aureus 2%

MBC by tube dilution: Pseudomonas aeruginosa 10%

Proteus vulgaris 8% Escherichia coli 10% Staphylococcus aureus 4%

Tube number	1	2	3	4	5	6	7	8	9	10
Concentration of Citrofresh %	12.5	6.25	3.12	1.56	0.78	0.39	0.19	0.098	0.05	Neg
MIC (%)			64	32	16	8	4	2	1	
Organism 1	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Growth	Growth	Ng
Organism 2	Ng	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Growth	Ng
Organism 3	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Growth	Growth	Ng
Organism 4	Ng	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Growth	Ng
MBC (%)			40	20	10	8	4	2	1	
Organism 1.	Ng	Ng		Ng	Ng	Growth	Growth	Growth	Growth	Ng
Organism 2	Ng	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Growth	Ng
Organism 3	Ng	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Growth	Ng
Organism 4	Ng	Ng	Ng	Ng	Ng	Ng	Ng	Growth	Growth	Ng

Initial inoculum concentration: 5-7x10^9 orgs\ ml

Incubation temperature and time: 37 degrees Celsius for 24 hrs

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

(The above test validated, using Virkon S registered disinfectant)

Concentration of Citrofresh	4	4%		3%	1	0%	12%	
Time of challenge	8 min.	18 min.						
Organism tested								
Pseudomonas aeruginosa	3/5 Growth	3/5 Growth	1/5 Growth	2/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth
NCTC 6749								
Proteus vulgaris NCTC 4635	4/5 Growth	3/5 Growth	2/5 Growth	2/5 Growth	1/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth
Escherichia coli NCTC 8196	4/5 Growth	2/5 Growth	1/5 Growth	2/5 Growth	1/5 Growth	0/5 Growth	0/5 Growth	0/5 Growth
Staphylococcus aureus NCTC 4163	2/5 Growth	2/5 Growth	1/5 Growth	1/5 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: 5-7x10^9 orgs\ ml (High Load)

Incubation temperature and time: 37 degrees Celsius for 48 hrs

Condition: clean <u>dirty</u> (underline appropriate)

Effective concentration: Pseudomonas aeruginosa 10%

Proteus vulgaris 8-10% Escherichia coli 10% Staphylococcus aureus 4%

Recommended concentration: Pseudomonas aeruginosa 10%

Proteus vulgaris 10% Escherichia coli 10% Staphylococcus aureus 4%

Controls:

Recovery Broth contamination
Disinfectant contamination
Fertility test
Inactivator Efficacy
No growth
Growth
Growth

Results of controls: Validated test shows Citrofresh is effective against the four

Bacteria tested.

Authorised by:

Zoltan Nack MSc. MBA. MASM

Biologist, Senior Scientist, Analytical MicroLabs