

Evaluation of Citrofresh 14P for GDM Technologies

Disinfectants evaluated:	Citrofresh 14P in 2%- 4% and 6% concentration	
Method used:	Kelsey-Sykes Capacity Test	
Organisms used:	Staphylococcus aureus	NCTC 6571
	Pseudomonas aeruginosa	NCTC 10332
	Salmonella cholerasuis	ATCC 14028
	MRSA	NCTC 43300
Test condition:	Dirty condition (1% Bovine Serum Albumin) in Standard Hard Water.	
Controls:	Non-inoculated media:	tested for sterility
	Positive (growth) control:	no disinfectant added
	Negative control:	no organism added
Aim of testing:	TGA approval for Hospital Grade Disinfectant, general and specific for MRSA	
Abbreviations:	Ng	No growth
	Ng x 5	No growth in 5 tubes
	1/5 to 5/5	Growth in 1 to 5 out of 5 tubes
	orgs/ml	Organisms per millilitre

1. Table of results:

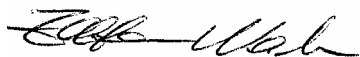
	Citrofresh 14 P (2%)	Citrofresh 14 P (4%)	Citrofresh 14P (6%)	Comments
Staphylococcus aureus NCTC 6571				
Initial count orgs/ml	1.3 x 10 ⁸ 1.2 x 10 ⁸ 1.2 x 10 ⁸	1.3 x 10 ⁸ 1.2 x 10 ⁸ 1.2 x 10 ⁸	1.3 x 10 ⁸ 1.2 x 10 ⁸ 1.2 x 10 ⁸	
10 min. exposure	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	
20 min. exposure	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	
30 min. exposure	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	
Salmonella choleraesuis ATCC 14028				
Initial count orgs/ml	1.5 x 10 ⁸ 6.0 x 10 ⁷ 1.2 x 10 ⁸	1.5 x 10 ⁸ 6.0 x 10 ⁷ 1.2 x 10 ⁸	1.5 x 10 ⁸ 6.0 x 10 ⁷ 1.2 x 10 ⁸	
10 min. exposure	4/5 growth 2/5 growth 3/5 growth	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	2% failed in first test
20 min. exposure	4/5 growth 3/5 growth 3/5 growth	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	2% failed in first test
30 min. exposure	5/5 growth 3/5 growth 3/5 growth	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	2% failed in first test
Pseudomonas aeruginosa NCTC 10332				
Initial count orgs/ml	1.3 x 10 ⁸ 6.5 x 10 ⁷ 1.3 x 10 ⁸	1.3 x 10 ⁸ 6.5 x 10 ⁷ 1.3 x 10 ⁸	1.3 x 10 ⁸ 6.5 x 10 ⁷ 1.3 x 10 ⁸	
10 min. exposure	4/5 growth 2/5 growth 1/5 growth	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	2% failed in first and second test
20 min. exposure	3/5 growth 3/5 growth 2/5 growth	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	2% failed in first and second test
30 min exposure	4/5 growth 4/5 growth 3/5 growth	Ng x 5 1/5 growth Ng x 5	Ng x 5 Ng x 5 Ng x 5	2% failed in first and second test

2. Table of results:

Methicillin Resistant Staphylococcus aureus (MRSA) ATCC 43300	Citrofresh 14P (2%)	Citrofresh 14P (4%)	Citrofresh 14P (6%)	Comments
Initial count orgs/ml	1.2 x 10 ⁸ 1.3 x 10 ⁸ 1.1 x 10 ⁸	1.2 x 10 ⁸ 1.3 x 10 ⁸ 1.1 x 10 ⁸	1.2 x 10 ⁸ 1.3 x 10 ⁸ 1.1 x 10 ⁸	
10 min. exposure	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	
20 min. exposure	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	
30 min exposure	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	Ng x 5 Ng x 5 Ng x 5	

Literature: Principles and Practice of Disinfection, Preservation and Sterilization,
A.D. Russell, W.B. Hugo, G.A.J Ayliffe, Blackwell Science Ltd, Third Edition, 1999

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