

Analytical MicroLabs

Industrial Microbiologists

NATA Accredited Laboratory: 14917

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Citrofresh Bactericidal Efficacy testing

Certificate number: 010905
Batch number: Citrofresh 360332
Production date: March 2005
Date or period of testing: 01/09/05-31/09/05

Organism tested: 1. *Salmonella salford* IMVS 1710

Kelsey- Maurer Capacity test (TGA Disinfectant test, Appendix 54, 54A, TGA Protocol)
(The above test was validated, using "Virkon S" registered disinfectant)

Summary of results: Day 1

Concentration of Citrofresh 14P >	8%	
Exposure time >	8 min.	18 min.
Organism tested		
Salmonella salford IMVS 1710	1/5Growth	2/5Growth

0, 1, 2, 3, 4, 5/5 growth represent the positive broth (visible growth) out of 5 Nutrient broth No. 2

Initial bacterial load: *Salmonella salford* 4.0×10^8 orgs/ml
(Day 1)

Controls:	1. Recovery Broth contamination	No growth
(Day 1)	2. Disinfectant contamination	No growth
	3. Fertility test	Growth
	4. Inactivator Efficacy	Growth

Summary of results: Day 3

Concentration of Citrofresh 14P >	4%	
Exposure time >	8 min.	18 min.
Organism tested		
Salmonella salford IMVS 1710	2/5Growth	2/5Growth

0, 1, 2, 3, 4, 5/5 growth represent the positive broth (visible growth) out of 5 Nutrient broth No. 2

Initial bacterial load: **Salmonella salford** 9.0×10^8 orgs/ml
(Day 3)

Controls:	1. Recovery Broth contamination	No growth
(Day 3)	2. Disinfectant contamination	No growth
	3. Fertility test	Growth
	4. Inactivator Efficacy	Growth

Summary of results: Day 5

Concentration of Citrofresh 14P >	4%	
Exposure time >	8 min.	18 min.
Organism tested		
Salmonella salford IMVS 1710	2/5Growth	2/5Growth

0, 1, 2, 3, 4, 5/5 growth represent the positive broth (visible growth) out of 5 Nutrient broth No. 2

Initial bacterial load: **Salmonella salford** 1.5×10^9 orgs/ml
(Day 5)

Controls:	1. Recovery Broth contamination	No growth
(Day 5)	2. Disinfectant contamination	No growth
	3. Fertility test	Growth
	4. Inactivator Efficacy	Growth

Number of challenges: Two (2) after 8 and 18 min.

Origin of Test Organisms: The University of Queensland, Australia

Enumeration of initial bacterial load: PCA in duplicate-pour-plate technique

Incubation temperature and time: as per TGA Appendix 54, 54A, page 12 to 17.
(37 degree Celsius, 48 hrs)

Medium for growth of Test Organisms: Wright- Mundy Dextrose medium (Difco)

Recovery Medium: Nutrient Broth No. 2 (Oxoid)

Diluent for Citrofresh 14P and 1W: Sterile Hard Water (Melbourne University)

Resuspension of centrifuged organisms: dirty condition- 5% yeast suspension

Temperature during testing: 20 degree Celsius in air-conditioned room

(Note for “Inactivator Efficacy”: Dilution of the disinfectant, after exposure to the bacteria, was always sufficient to stop the activity of the disinfectant.

Inactivator Efficacy test gave no different result using neutralizer: 0.1% peptone, 0.1% sodium thiosulphate, 0.5% Tween 80 and 0.07% lecithin, dissolved in distilled water)



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