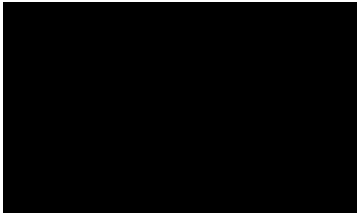




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EN 13727: BACTERICIDAL EFFICACY ————— FINAL TEST REPORT

Contact Person:
Company:



Lab Number : M20-6100
Order reference : ADI
Sample Date : 04/06/2020
Submit Date : 04/06/2020
Report Date : 03/07/2020

Disclaimer:

The results reported relate only to the samples tested and is expressed on an 'as received' basis unless specified otherwise. The test report shall not be reproduced except in full, without written approval of the Laboratory.

SANS 53727:2011 - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants for instruments used in the medical area.

Product Identification:	ADI
Active Substances:	SODIUM SULPHATE

Batch Number:	NOT SUPPLIED
Expiry Date:	NOT SUPPLIED
Storage Conditions:	AMBIENT OUT OF DIRECT SUNLIGHT
Recommended Diluent:	POTABLE WATER

Appearance of Product:	SUITABLE FOR TESTING
Diluent Used in Test:	STERILE HARD WATER
Product Concentrations:	5,5g/L
Appearance of Dilutions:	HOMOGENOUS SUSPENSION
Interfering Substances:	0,3g/L BOVINE SERUM ALBUMIN
Appearance during Test:	HOMOGENOUS SUSPENSION
Method:	MEMBRANE FILTRATION
Neutralizer / Rinsing Liquid:	TRYPTONE SOY + 30g/L POLYSORBATE 80

Analysis performed by:	J JACOBS
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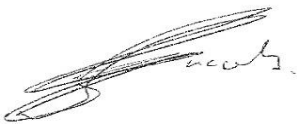
Conclusion:

Validations and Controls:

All validations and controls were within specification during the test

Testing was performed using the membrane filtration method as no suitable neutraliser could be found to inactivate the effect of the active ingredient in the culture media.

ADI eliminated >99,999% of viable *S.aureus*, *E.hirae* and *P.aeruginosa* when allowed a contact period of 5 minutes under simulated clean conditions with bovine serum albumin at a concentration of 0,3g/L.



Johan Jacobs
Technical Advisor

Organism:	Pseudomonas aeruginosa ATCC15442
Replicate:	1 of 2

Test Date:	15/06/2020
Test Temperature:	20°C
Incubation Temperature:	37°C

Validation and Controls:

Validation suspension (N_{v0})		Experimental condition control (A)		Filtration control (B)		Method Validation (C)	
V _c 1a	31	V _c 1a	57	V _c 1a	51	V _c 1a	48
V _c 1b	37						
V _c 2a	36	V _c 2a	63	V _c 2a	57	V _c 2a	43
V _c 2b	27						
$\bar{X} =$	65,5	$\bar{X} =$	60	$\bar{X} =$	54	$\bar{X} =$	45,5
Spec	$30 \leq \bar{X} \leq 160$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$
Complies	Yes	Complies	Yes	Complies	Yes	Complies	Yes

Test Suspension and Test:

Test Suspension (N and N ₀):	N	V_c1	V_c2	\bar{X} wm = 3,15E+08	log10N= 8,50
	10 ⁻⁶	>300	>300	N ₀ = N/10	log10N ₀ = 7,50
	10 ⁻⁷	34	29	$7.17 \leq \text{Lg}N_0 \leq 7.70?$	Yes

Product Conc.	Vc1	Vc2	Na = $\bar{X} \times 10$	Log Na	Log R	Contact time
1,1%	0	0	<10	<1	>5	5 MINUTES
0,55%	0	0	<10	<1	>5	5 MINUTES
0,055%	>150	>150	>1500	>3,18	<4,22	5 MINUTES

Summary:

Lowest effective concentration	0,55%
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Organism:	Pseudomonas aeruginosa ATCC15442
Replicate:	2 of 2

Test Date:	15/06/2020
Test Temperature:	20°C
Incubation Temperature:	37°C

Validation and Controls:

Validation suspension (N_{v0})		Experimental condition control (A)		Filtration control (B)		Method Validation (C)	
V _c 1a	31	V _c 1a	57	V _c 1a	51	V _c 1a	45
V _c 1b	37						
V _c 2a	36	V _c 2a	63	V _c 2a	57	V _c 2a	39
V _c 2b	27						
$\bar{X} =$	65,5	$\bar{X} =$	60	$\bar{X} =$	54	$\bar{X} =$	42
Spec	$30 \leq \bar{X} \leq 160$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$
Complies	Yes	Complies	Yes	Complies	Yes	Complies	Yes

Test Suspension and Test:

Test Suspension (N and N ₀):	N	V_c1	V_c2	\bar{X} wm = 3,15E+08	log10N= 8,50
	10 ⁻⁶	>300	>300	N ₀ = N/10	log10N ₀ = 7,50
	10 ⁻⁷	34	29	$7.17 \leq \text{Lg}N_0 \leq 7.70?$	Yes

Product Conc.	Vc1	Vc2	Na = $\bar{X} \times 10$	Log Na	Log R	Contact time
1,1%	0	0	<10	<1	>5	5 MINUTES
0,55%	0	0	<10	<1	>5	5 MINUTES
0,055%	>150	>150	>1500	>3,18	<4,22	5 MINUTES

Summary:

Lowest effective concentration	0,55%
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Organism:	Staphylococcus aureus ATCC6538
Replicate:	1 of 2

Test Date:	17/06/2020
Test Temperature:	20°C
Incubation Temperature:	37°C

Validation and Controls:

Validation suspension (N _{v0})		Experimental condition control (A)		Filtration control (B)		Method Validation (C)	
V _c 1a	42	V _c 1a	68	V _c 1a	61	V _c 1a	54
V _c 1b	38						
V _c 2a	34	V _c 2a	73	V _c 2a	57	V _c 2a	59
V _c 2b	41						
$\bar{X} =$	77,5	$\bar{X} =$	70,5	$\bar{X} =$	59	$\bar{X} =$	56,5
Spec	30 ≤ \bar{X} ≤ 160	Spec	$\bar{X} \geq 0.5 \times N_{v0}$	Spec	$\bar{X} \geq 0.5 \times N_{v0}$	Spec	$\bar{X} \geq 0.5 \times N_{v0}$
Complies	Yes	Complies	Yes	Complies	Yes	Complies	Yes

Test Suspension and Test:

Test Suspension (N and N ₀):	N	V_c1	V_c2	\bar{X} wm = 3,90E+08	log10N = 8,59
	10 ⁻⁶	>300	>300	N ₀ = N/10	log10N ₀ = 7,59
	10 ⁻⁷	35	43	7.17 ≤ LgN ₀ ≤ 7.70?	Yes

Product Conc.	Vc1	Vc2	Na = $\bar{X} \times 10$	Log Na	Log R	Contact time
1,1%	0	0	<10	<1	>5	5 MINUTES
0,55%	0	0	<10	<1	>5	5 MINUTES
0,055%	>150	>150	>1500	>3,18	<4,23	5 MINUTES

Summary:

Lowest effective concentration	0,55%
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Organism:	Staphylococcus aureus ATCC6538
Replicate:	2 of 2

Test Date:	17/06/2020
Test Temperature:	20°C
Incubation Temperature:	37°C

Validation and Controls:

Validation suspension (N_{v0})		Experimental condition control (A)		Filtration control (B)		Method Validation (C)	
V _c 1a	42	V _c 1a	68	V _c 1a	61	V _c 1a	49
V _c 1b	38						
V _c 2a	34	V _c 2a	73	V _c 2a	57	V _c 2a	56
V _c 2b	41						
$\bar{X} =$	77,5	$\bar{X} =$	70,5	$\bar{X} =$	59	$\bar{X} =$	52,5
Spec	$30 \leq \bar{X} \leq 160$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$
Complies	Yes	Complies	Yes	Complies	Yes	Complies	Yes

Test Suspension and Test:

Test Suspension (N and N ₀):	N	V_c1	V_c2	\bar{X} wm = 3,90E+08	log10N= 8,59
	10 ⁻⁶	>300	>300	N ₀ = N/10	log10N ₀ = 7,59
	10 ⁻⁷	35	43	$7.17 \leq \text{Lg}N_0 \leq 7.70?$	Yes

Product Conc.	Vc1	Vc2	Na = $\bar{X} \times 10$	Log Na	Log R	Contact time
1,1%	0	0	<10	<1	>5	5 MINUTES
0,55%	0	0	<10	<1	>5	5 MINUTES
0,055%	>150	>150	>1500	>3,18	<4,23	5 MINUTES

Summary:

Lowest effective concentration	0,55%
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Organism:	Enterococcus hirae ATCC10541
Replicate:	1 of 2

Test Date:	18/06/2020
Test Temperature:	20°C
Incubation Temperature:	37°C

Validation and Controls:

Validation suspension (N_{v0})		Experimental condition control (A)		Filtration control (B)		Method Validation (C)	
V _c 1a	42	V _c 1a	75	V _c 1a	77	V _c 1a	69
V _c 1b	37						
V _c 2a	39	V _c 2a	69	V _c 2a	71	V _c 2a	61
V _c 2b	45						
$\bar{X} =$	81,5	$\bar{X} =$	72	$\bar{X} =$	74	$\bar{X} =$	65
Spec	$30 \leq \bar{X} \leq 160$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$
Complies	Yes	Complies	Yes	Complies	Yes	Complies	Yes

Test Suspension and Test:

Test Suspension (N and N ₀):	N	V_c1	V_c2	\bar{X} wm = 3,90E+08	log10N= 8,59
	10 ⁻⁶	>300	>300	N ₀ = N/10	log10N ₀ = 7,59
	10 ⁻⁷	43	35	$7.17 \leq \text{Lg}N_0 \leq 7.70?$	Yes

Product Conc.	Vc1	Vc2	Na = $\bar{X} \times 10$	Log Na	Log R	Contact time
1,1%	0	0	<10	<1	>5	5 MINUTES
0,55%	0	0	<10	<1	>5	5 MINUTES
0,055%	>150	>150	>1500	>3,18	<4,43	5 MINUTES

Summary:

Lowest effective concentration	0,55%
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Organism:	Enterococcus hirae ATCC10541
Replicate:	2 of 2

Test Date:	18/06/2020
Test Temperature:	20°C
Incubation Temperature:	37°C

Validation and Controls:

Validation suspension (N_{v0})		Experimental condition control (A)		Filtration control (B)		Method Validation (C)	
V _c 1a	42	V _c 1a	75	V _c 1a	77	V _c 1a	64
V _c 1b	37						
V _c 2a	39	V _c 2a	69	V _c 2a	71	V _c 2a	67
V _c 2b	45						
$\bar{X} =$	81,5	$\bar{X} =$	72	$\bar{X} =$	74	$\bar{X} =$	65,5
Spec	$30 \leq \bar{X} \leq 160$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$	Spec	$\bar{X} \geq 0.5XN_{v0}$
Complies	Yes	Complies	Yes	Complies	Yes	Complies	Yes

Test Suspension and Test:

Test Suspension (N and N ₀):	N	V_c1	V_c2	\bar{X} wm = 3,90E+08	log10N= 8,59
	10 ⁻⁶	>300	>300	N ₀ = N/10	log10N ₀ = 7,59
	10 ⁻⁷	43	35	$7.17 \leq \text{Lg}N_0 \leq 7.70?$	Yes

Product Conc.	Vc1	Vc2	Na = $\bar{X} \times 10$	Log Na	Log R	Contact time
1,1%	0	0	<10	<1	>5	5 MINUTES
0,55%	0	0	<10	<1	>5	5 MINUTES
0,055%	>150	>150	>1500	>3,18	<4,43	5 MINUTES

Summary:

Lowest effective concentration	0,55%
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