



EVS-EN 1276:2019
OÜ BALTIACHEMI
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Quantitative suspension test for the evaluation of bactericidal activity in general area (phase 2, step 1)

TEST REPORT no 508

1. General information and material

Client:

OY FINNSCO
Reg. 2387841-4
Peltosaarenkatu 19 FI-11130 Riihimäki, Finland

2. Identification of sample

Name of the product:	PRO-10® PINTADESI
Batch number:	23.04.2020
Manufacturer:	OY FINNSCO
Date of delivery:	2020/05/05

Microbiologist
Ljudmila Shljapnikova
Ph.D.
Head of the Laboratory

Storage conditions: room temperature and darkness
Apperance of the product: clear colorless liquid
Recommended diluent: product is ready for use
Active substance: Ethanol 73,5 %

3. Test conditions

Test period: 2020/05/12 – 2020/05/14
Date of test: 2020/05/12
Product test concentrations: 98 %
Exposure time: 30 sec.
Test temperature: $19,5 \pm 0,5^{\circ}\text{C}$
Organic load: clean conditions (bovine albumine 0,3 g/l)
Neutralizer: Polysorbate 80, 30 g/l, Lecithin, 3 g/l, Saponin, 30 g/l
Test organisms: Escherichia coli ATCC 10536, Staphylococcus aureus ATCC 6538,
Pseudomonas aeruginosa ATCC 15442, Enterococcus hirae ATCC 10541
modified method dilution neutralization

4. Methods**5. Results**

see annex

6. Conclusion

In accordance with EVS-EN 1276:2019, product PRO-10® PINTADESI (the batch number 23.04.2020) with concentration 98 % possesses bactericidal activity in suspension test in 30 sec. at 20 °C under clean conditions for reference strains Escherichia coli ATCC 10536, Staphylococcus aureus ATCC 6538, Pseudomonas aeruginosa ATCC 15442 and Enterococcus hirae ATCC 10541. The product PRO-10® PINTADESI (the batch number 23.04.2020) demonstrates at least a 5 lg reduction.

Total 6 pages

Annex on 4 pages

2020/05/14

Annex 1

VALIDATION AND CONTROLS

Test organisms	Validation suspension N _{vo}			Experimental conditions control A			Neutralizer control B			Method validation C 98 %		
	V _{c1}	V _{c2}	$\bar{X}$	V _{c1}	V _{c2}	$\bar{X}$	V _{c1}	V _{c2}	$\bar{X}$	V _{c1}	V _{c2}	$\bar{X}$
Escherichia coli ATCC 10536	45	59	52	43	38	41	35	41	38	37	44	41
Staphylococcus aureus ATCC 6538	79	92	86	80	71	76	61	76	69	65	69	67
Pseudomonas aeruginosa ATCC15442	66	70	68	59	62	61	52	54	533	54	61	58
Enterococcus hirae ATCC 10541	109	117	113	90	94	92	100	94	97	92	84	88

Annex 2

TEST SUSPENSIONS

Test organisms	Dilution step	Vc ₁	Vc ₂	N No
Escherichia coli ATCC 10536	-7	>200	>200	$N = 2,1 \times 10^9 = \lg 9,32$ $No = N / 100 = \lg 7,32$ $7,17 \leq \lg No \leq 7,70$
	-8	16	26	
Staphylococcus aureus ATCC 6538	10 ⁻⁷	>200	>100	$N = 1,9 \times 10^9 = \lg 9,28$ $No = N / 100 = \lg 7,28$ $7,17 \leq \lg No \leq 7,70$
	10 ⁻⁸	12	26	
Pseudomonas aeruginosa ATCC 15442	10 ⁻⁷	163	140	$N = 1,53 \times 10^9 = \lg 9,18$ $No = N / 100 = \lg 7,18$ $7,17 \leq \lg No \leq 7,70$
	10 ⁻⁸	14	21	
Enterococcus hirae ATCC 10541	10 ⁻⁷	193	169	$N = 1,8 \times 10^9 = \lg 9,26$ $No = N / 100 = \lg 7,26$ $7,17 \leq \lg No \leq 7,70$
	10 ⁻⁸	12	22	

Annex 3

TESTS

Test organism	Conditions	Dilution step	Vc ₁	Vc ₂	Na x 10	lg Na	lg R	Contact time
Escherichia coli ATCC 10536	Clean	1	0	0	<140	<2,15	>5,17	30 sec.
		-1	0	0				
		-2	0	0				
		-3	0	0				
Staphylococcus aureus ATCC 6538	Clean	1	11	6	85	1,93	5,35	30 sec.
		-1	0	0				
		-2	0	0				
		-3	0	0				
Pseudomonas aeruginosa ATCC 15442	Clean	1	9	10	95	1,98	5,2	30 sec.
		-1	0	0				
		-2	0	0				
		-3	0	0				
Enterococcus hirae ATCC 10541	Clean	1	0	0	< 140	< 2,15	>5,08	30 sec.
		-1	0	0				
		-2	0	0				
		-3	0	0				

Annex 4

$$N = c / (n_1 + 0,1 n_2) \times 10^{-7}$$

$$N_0 = N / 100$$

$$N_a = c \times 10 / n$$

$$R = \lg N_0 - \lg N_a$$

N – is the number of colonies for 1 ml test suspension

V_{C1} , V_{C2} - is the is number of colonies for 1 ml sample

n – is the number of Vc-values taken into account

R – reduction