

Test Report: EN 1276:2019 Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas – Test method and requirements (phase 2, step 1)

Test Laboratory**BluTest Laboratories Ltd**

5 Robroyston Oval, Nova Business Park, Glasgow G33 1AP

Identification of sample

Name of the product

Target-19 Anti-Viral & Bactericidal Hand Sanitiser

Batch number

K5093

Client

RJN Chemicals Limited

Client address

5 The Ridgeway, Iver, SLO 9HX

Project code

BT-GEN-03

Date of delivery

16 April 2020

Storage conditions

Ambient

Active substances

L-lactic acid

Test Method and Neutralisation

Method

Filtration neutralisation

Experimental Conditions

Period of analysis

13 May 2020 to 22 May 2020

Product diluent used

Sterile synthetic hard water

Product test concentrations

10.0% v/v; 5.0% v/v; 2.5% v/v

Appearance product dilutions

No changes noted

Appearance in test mixture

No changes noted

Contact time

t = 5 mins ± 10 s

Test temperature

20°C ± 1°C

Interfering substance

3.0g/l bovine albumin

Temperature of incubation

37°C ± 1°C

Identification of strains

Staphylococcus aureus ATCC 6538*Enterococcus hirae* ATCC 10541*Pseudomonas aeruginosa* ATCC 15442*Escherichia coli* ATCC 10536

EN 1276:2009 Results

Results for the efficacy of Target-19 Anti-Viral & Bactericidal Hand Sanitiser from RJN Chemicals Ltd under Dirty conditions									
Test organisms	Validation test				Bacterial Test Suspension (N)	Test procedure at concentration % (V/V)			
	Bacterial Suspension (Nv)	Experimental Conditions (A)	Filtration Control (B)	Filtration Test Control (C)		2.5%	5.0%	10.0%	
<i>Pseudomonas aeruginosa</i>	Vc: 80 ; 94	Vc: 62 ; 64	Vc: 51 ; 60	Vc: 58 ; 79	10-6: >330 ; >330 10-7: 40 ; 36 N: 3.8 0E +08	Vc: 30 ; 6 Na: 1.80E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02
ATCC 15442	Nv: 8.70E+02	A: 6.30E+01	B: 5.55E+01	C: 6.85E+01	Q: n/a	R: >10(5)	>10(5)	>10(5)	>10(5)
Validation	30 ≤ Nv ₀ ≤ 160 ? yes	A ≥ 0.5 x Nv ₀ ? yes	B ≥ 0.5 x Nv ₀ ? yes	C ≥ 0.5 x Nv ₀ ? Yes	7.17 ≤ log N ≤ 7.70 ? yes	Test is valid			
<i>Escherichia coli</i>	Vc: 80 ; 73	Vc: 79 ; 82	Vc: 69 ; 80	Vc: 84 ; 89	10-6: >330 ; >330 10-7: 29 ; 39 N: 3.4 0E +08	Vc: 0 ; 0 Na: <1.40E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02
ATCC 10536	Nv: 7.65E+02	A: 8.05E+01	B: 7.45E+01	C: 8.65E+01	Q: n/a	R: >10(5)	>10(5)	>10(5)	>10(5)
Validation	30 ≤ Nv ₀ ≤ 160 ? yes	A ≥ 0.5 x Nv ₀ ? yes	B ≥ 0.5 x Nv ₀ ? yes	C ≥ 0.5 x Nv ₀ ? Yes	7.17 ≤ log N ₀ ≤ 7.70 ? yes	Test is valid			
<i>Staphylococcus aureus</i>	Vc: 62 ; 51	Vc: 49 ; 51	Vc: 55 ; 38	Vc: 51 ; 52	10-6: >330 ; >330 10-7: 26 ; 17 N: 2.1 5E +08	Vc: 3 ; 5 Na: <1.40E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02
ATCC 6538	Nv: 5.65E+02	A: 5.00E+01	B: 4.65E+01	C: 5.15E+01	Q: n/a	R: >10(5)	>10(5)	>10(5)	>10(5)
Validation	30 ≤ Nv ₀ ≤ 160 ? yes	A ≥ 0.5 x Nv ₀ ? yes	B ≥ 0.5 x Nv ₀ ? yes	C ≥ 0.5 x Nv ₀ ? Yes	7.17 ≤ log N ₀ ≤ 7.70 ? yes	Test is valid			
<i>Enterococcus hirae</i>	Vc: 65 ; 68	Vc: 43 ; 84	Vc: 47 ; 49	Vc: 53 ; 52	10-6: >330 ; >330 10-7: 22 ; 26 N: 2.40E+08	Vc: 9 ; 1 Na: <1.40E+02	1 ; 0 <1.40E+02	0 ; 0 <1.40E+02	0 ; 0 <1.40E+02
ATCC 10541	Nv: 6.65E+02	A: 6.35E+01	B: 4.80E+01	C: 5.25E+01	Q: n/a	R: >10(5)	>10(5)	>10(5)	>10(5)
Validation	30 ≤ Nv ₀ ≤ 160 ? yes	A ≥ 0.5 x Nv ₀ ? yes	B ≥ 0.5 x Nv ₀ ? yes	C ≥ 0.5 x Nv ₀ ? Yes	7.17 ≤ log N ₀ ≤ 7.70 ? yes	Test is valid			
Please note: the upper limit for counting bacterial plates is 330 cfu. Enter as >330. For filter membranes, this is 165 cfu. Enter as >165.									
Definitions: Vc = viable count; N = number of cfu/ml in the bacterial test suspension; Q = quotient of control of weighted mean counts; Nv = number of cfu/ml in the bacterial validation suspension; A = number of cfu/ml in the experimental conditions validation; B = number of cfu/ml in the filtration control; C = number of cfu/ml in the membrane-filtration neutralisation method validation; Na = number of cfu/ml in test mixture after contact time; R = reduction in viability (Log10)									

Conclusion

According to EN 1276:2019, **Target-19 Anti-Viral & Bactericidal Hand Sanitiser POSSESSES BACTERICIDAL** activity at a concentration of **2.5% v/v** as tested after **5 MINUTES** at **20°C** under **DIRTY** conditions (3.0 g/l bovine albumin) against *Pseudomonas aeruginosa* ATCC 15442, *Escherichia coli* ATCC 10536, *Staphylococcus aureus* ATCC 6538 and *Enterococcus hirae* ATCC 8043.

Authorised signatory



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BluTest Laboratories Ltd
Glasgow, UK.

Date: 27 MAY 2020



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Expanded Uncertainty of Measurement $U = \pm 0.0044 \text{ logs}$

DISCLAIMER

The results in this test report only pertain to the sample supplied.

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