



d technology Pvt. ltd.

Unit No-19, Building No-F-8, Bhumi World Industrial Park,
Opp. Tata Amantra, Pimpas, Mumbai-Nashik Highway, Thane-421302

Test Report

Report No: R-18-19/10049

Report Date: 13.04.19

Prepared For- Mr. Umesh Tripathi
SANOSIL BIOTECH PVT. LTD.
Warden House, 1st Floor,
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Prepared By- Ms. Zehra Matcheswalla
Executive-Techno commercial,
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Objective:

To estimate the antimicrobial efficacy of Virosil against standard microbial cultures

Sample Details:

Sample Type	Name	Batch No	Mfg Date	Expiry Date	Quantity
Disinfectant	Virosil Chlorine Free Fumigant	VPS19035	March 2019	February 2021	5L

Test Method: As per client's In-house protocol

Concentration: 5%

Test Organisms:

1. *Escherichia coli* ATCC 10536
2. *Staphylococcus aureus* ATCC 6538P
3. *Pseudomonas aeruginosa* ATCC 9027

Contact Time:

- a. 3 minutes
- b. 15 minutes
- c. 30 minutes

Clients In-House Protocol summary:

- a) Test organisms were subcultured on Soyabean Casein Digest agar one day prior to analysis and incubated at 30⁰C-35⁰C for 24 hours
- b) Post incubation, culture suspension were prepared in 9ml St. Saline and serially dilute upto 10⁻⁸ to 10⁻⁹
- c) These dilutions were then spread plated on Soyabean Casein Digest agar and incubate at 30⁰C-35⁰C for 24 hours. All dilution tubes were stored at 2⁰C-8⁰C for further use
- d) Post incubation, the tube containing 10-100 cfu/0.1ml was selected
- e) Control- 100 fold dilutions were performed from the selected tube i.e. 0.1ml from the selected tube in 9ml saline. This tube was further diluted and filtered in a membrane filtration assembly using 0.1% Peptone and 0.1% Tween 80

f) Test-

- 1) 0.1ml from the selected tube was added to 9ml of diluted virosil for required contact time
- 2) Post contact time, the contents were filtered from the membrane and washed with 2X 100ml 0.1% Peptone and 0.1% Tween 80
- 3) Then after giving 2 minutes of contact with 9ml Dey Engley neutralizing broth, the mixture was filtered
- 4) Final wash was again given with 100ml 0.1% Peptone and 0.1% Tween 80 and membrane paper was placed on Soyabean Casein Digest agar
- 5) The plates were incubated at 30⁰C-35⁰C for 24 hours
- 6) The counts were recorded post incubation

Results:

1. *Escherichia coli* ATCC 8739

TEST ORGANISM	Trial	Control	Avg cfu /ml	Log value
<i>Escherichia coli</i> ATCC 8739	N=1	Positive control	4.10 x 10 ¹	1.6127

TEST ORGANISM	Trial	Initial culture count	Log value	Time of exposure	Avg cfu /ml	Log value	Log reduction	Percent reduction
<i>Escherichia coli</i> ATCC 8739	N=1	3.95 x 10 ⁴	4.5965	5 minutes	1.90 x 10 ¹	1.2787	3.3178	99.95%
				15 minute	<10	<1.0000	>3.5965	>99.99%
				30 minutes	<10	<1.0000	>3.5965	>99.99%

2. *Staphylococcus aureus* ATCC 6538P

TEST ORGANISM	Trial	Control	Avg cfu /ml	Log value
<i>Staphylococcus aureus</i> ATCC 6538P	N=1	Positive control	5.60 x 10 ¹	1.7481

TEST ORGANISM	Trial	Initial culture count	Log value	Time of exposure	Avg cfu /ml	Log value	Log reduction	Percent reduction
<i>Staphylococcus aureus</i> ATCC 6538P	N=1	4.50 x 10 ⁴	4.6532	5 minutes	4.10 x 10 ¹	1.6127	3.0405	99.90%
				15 minute	<10	<1.0000	>3.6532	>99.99%
				30 minutes	<10	<1.0000	>3.6532	>99.99%

3. *Pseudomonas aeruginosa* ATCC 9027

TEST ORGANISM	Trial	Control	Avg cfu /ml	Log value
<i>Pseudomonas aeruginosa</i> ATCC 9027	N=1	Positive control	4.40 x 10 ¹	1.6434

TEST ORGANISM	Trial	Initial culture count	Log value	Time of exposure	Avg cfu /ml	Log value	Log reduction	Percent reduction
<i>Pseudomonas aeruginosa</i> ATCC 9027	N=1	4.30 x 10 ⁴	4.6334	5 minutes	1.60 x 10 ¹	1.2041	3.4293	99.96%
				15 minute	<10	<1.0000	>3.6334	>99.99%
				30 minutes	<10	<1.0000	>3.6334	>99.99%



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Conclusion:

The submitted disinfectant sample at concentration of 5% was satisfactorily effective against all three microbial cultures at contact time of 15 minutes and 30 minutes giving complete inhibition of the microorganisms.

Checked by

Name : Ms. Zehra Matcheswalla

Designation : Executive-Techno commercial

Authorized Signatory

Name : Dr. Deepa Bhajekar

Designation : Managing Director

Note:

1. The results reported relate only to the sample(s) tested.
2. This test report, in full or in part, shall not be reproduced, used for any legal action, without prior written approval of laboratory.
3. The tests marked with #are subcontracted.
4. The Report no. with suffix R- Revised Report.

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