TEST REPORT

Applicant : Biotopica Group Pty Ltd
Address : Level 1, 53 Burswood Road, Burswood, WA 6100, Australia

The following merchandise was (were) submitted and identified by the client as:

Name of Sample :	Biotopica® Australia Antibacterial Surface Sanitiser & Protectant
Test Type :	Commission to conduct virus kill test
Sample Quantity :	1
Model :	300ml
Batch No. :	B8183
Brand :	Biotopica
Manufacturer:	Biotopica Group Pty Ltd
Manufacturer address	Level 1, 53 Burswood Road, Burswood, WA 6100, Australia
Sample Received :	2020/2/21
Test Period :	2020/2/24-2020/3/5
Test Items :	Please refer to next page(s).
Test Method :	Please refer to next page(s).
Test Result :	Please refer to next page(s).
Sample Description :	Liquid

Note:
1) The relevant items are not tested for qualification rectification; only as reference for internal use.
2) The test results shown in the report were carried out by Guangzhou Institute of Respiratory Disease Medicine Co., Ltd. The report certificate number is HYS202002191.
3) This report replaces the report JKK20020049E which was issued on 10 Apr. 2020.The original report is invalid.

Edited by: _____ Approved by: _____

Checked by: _____ Official Seal: _____

Add: No. 368 Xingke Road, Tianhe District, Guangzhou, P. R .China. ZIP Code: 510650
Tel: 020-85231290, 020-85231823 Website: http://www.cas-test.org
Fax: 020-85231035 E-mail: atc@gic.ac.cn

Test Method:

1. Test Item

1）Sample: Biotopica® Australia Antibacterial Surface Sanitiser & Protectant

2）Strain: Coronavirus HCoV-229E

3）Cell: Huh7

4）Neutralizer: 1.5% Twain, 0.5% Sodium thiosulfacte cell cultre medium

2. Test Request

1）Contact Time: 5 minutes

3. Test Method

Cytotoxicity Test

①Sample+neutralizer ②Sample+PBS buffer solution ③neutralizer ④ The PBS buffer solution was homogenised and rested at room temperature for 10 minutes. Huh7 cells were added into each group and incubated for 2~5 days.Observe the cell growth status and evaluate the toxicity to cells.

Identification test on neutralizer

Evaluate the candidate neutralizer. The test method and evaluation criterion refer to Technical Standard for Disinfection (2002) 2.1.1.10.5. ① Sample+coronavirus suspension, ②Sample+coronavirus suspension, ③ Sample+neutralizer, ④ neutralizer,⑤ PBS buffer solution+coronavirus suspension. Mix, homogenized and rest at room temperature for a certain time. Add PBS buffer solution into ①, add neutralization into ②,add coronavirus suspension into ③ and ④, mix thoroughly, place at room temperature for a certain time. Normal cells were used as control samples. The test was repeated 3 times.

Virus killing test

Refer to Technical Standard for Disinfection（2002）, the sample reacts with the coronavirus suspension for 5 minutes. A blank control group is set in the test.

4. Result

1. The neutralizer showed almost no toxic effect on Huh7 cells, while the product of neutralization showed a certain toxicity on Huh7 cells; the product of neutralization showed nearly no toxic effect on the cells after a certain degree of dilution.

2. The identification test on neutralizer shows that the neutralizer meets the test requirements and could neutralize the killing effect of the sample on coronavirus (Table 1).

3. Under the conditions set in this test, the sample reacts with the coronavirus suspension for 5 minutes, which has a certain killing effect on the coronavirus (Table 2).

******** To be continued ********

Table 1. Identification test on neutralizer with HCoV-229E

Group	First Test Log（$TCID_{50}$/ml）	Second Test Log（$TCID_{50}$/ml）	Third Test Log（$TCID_{50}$/ml）	Average Log（$TCID_{50}$/ml）
1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00
3	4.00	4.00	4.33	4.11
4	4.50	4.50	4.33	4.44
5	4.50	4.67	4.50	4.56
6	Cells grow normally			

Table 2.The negative logarithmic value and killing rate of Biotopica® Australia Antibacterial Surface Sanitiser & Protectant on coronavirus under specified settings

Virus	Time	Group	First Test Log ($TCID_{50}$/ml)	Second Test Log $TCID_{50}$/ml)	Third Test Log ($TCID_{50}$/ml)	Average Log ($TCID_{50}$/ml)	Average logarithm of virus inactivation	Killing rate %
HCoV-229E	5min	Test group	0.00	0.00	0.00	0.00	4.44	>99.99
		Control group	4.33	4.33	4.67	4.44		

******** To be continued ********

SAMPLE PHOTO

******** END OF REPORT ********

Statement

1. All samples and goods are accepted by The Guangzhou CAS Test Technical Services Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Client").
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3. Test report is invalid without signature of verifier and approver.
4. Test report is invalid if being supplemented, deleted or altered.
5. Without prior written permission of the Company, the test report cannot be reproduced in part (except in whole).
6. The result(s) shown in this test report refer only to the sample(s) tested, and do not apply to the same batch, the same size or the same brand of products (except the test sample) or to proving the related methods of making, processing or production of the test samples, the correctness and rationality of processes or process.
7. Objections to the test report must be submitted to the Company within 15 days. Otherwise, it will automatically deem to have accepted this test report.
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10. The result(s) or conclusion shown in this test report about the description of the characteristics, composition, properties or quality are based on the specific time, specific methods and specific applicable criteria . Using different methods and criteria or under different environmental conditions for testing, it may come to different conclusions.
11. This test report does not have probative effect to society.
12. Since the Company's causes lead to modify the contents of the test report, the Company shall reissue the test report and bear the modification cost. The Client shall return the original test report.
    Since the Client's causes lead to modify the contents of the test report, the Client need to submit an application form for report change to the Company. The Client shall bear the modification cost and return the original test report if the Company approves to reissue the test report.
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