



Liaoning Qianyi Testing and Evaluation Technology Development Co., Ltd. Test Report

小班

Report No.: J2019A07440

Sample name: IBREA MICRO SILVER HAND GEL

WITH PURE SILVER (ALCOHOL 38%)

Customer: Shanghai Naturie Co., Ltd.

July 14, 2020



Technology Development Co., Ltd.

Test Report

Sample No.: D202056	Report No.: J2019A07	440	Page: 1/12
Comple nome	IBREA MICRO SILVER HAND GEL WITH	H	
Sample name:	PURE SILVER (ALCOHOL 38%)	Sample quantity:	4 bottles
Customer:	Shanghai Naturie Co.,Ltd.	Appearance:	Gray gel, bottle
Producer:	Mi-Face Co.,Ltd.	Sample size:	50mL/ bottle
Lot No.:	20F001	Received date:	July 01, 2020
Inspection category	Entrusted inspection	Test completion date:	July 14, 2020
Items:	Identification test of neutralizer (staphylococ	ccus aureus, candida albicans	s);
items:	Bactericidal test (escherichia coli, staphyloco	occus aureus, candida albican	s)

A. Test standard

- 1.Identification test of neutralizer: "Technical standard for disinfection" (2002) 2.1.1.5.6;
- 2.Bactericidal test of escherichia coli and staphylococcus aureus : "Technical standard for disinfection" (2002)2.1.1.7.5;
 - 3. Bactericidal test of candida albicans: "Technical standard for disinfection" (2002)2.1.1.9.5.

B. Evaluation basis

- 1. Identification test of neutralizer: "Technical standard for disinfection" (2002) 2.1.1.5.7;
- 2. Bactericidal test of escherichia coliand and staphylococcus aureus: "Technical standard for disinfection" (2002) 2.1.1.7.7.
 - 3.Bactericidal test of candida albicans: "Technical standard for disinfection" (2002)2.1.1.9.6.

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C. Test conclusion

1. Identification test of neutralizer of staphylococcus aureus (carrier method)

The test was repeated three times. The test temperature was 20°C±1°C. 3.9% D/E neutralization broth, can effectively neutralize the effect of residual bactericidal gel on the bacteria surface. And the neutralizing agent and its products had no obvious adverse effect on the experimental bacteria and medium. The results show that the neutralizer is suitable for the bactericidal test of escherichia coli and staphylococcus aureus. Pick up the next page.



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2.Identification test of neutralizer of candida albicans (carrier method)

The test was repeated three times. The test temperature was 20°C±1°C. 3.9% D/E neutralization broth, can effectively neutralize the effect of residual bactericidal gel on the bacteria surface. And the neutralizing agent and its products had no obvious adverse effect on the experimental bacteria and medium. The results show that the neutralizer is suitable for the bactericidal test of candida albicans.

3.Bactericidal test of escherichia coli (carrier method)

The test was repeated three times. The test temperature was 20°C±1°C. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time was 0.5min、1min、1.5min. The average killing logarithm value of escherichia coli was ≥3.00, which meets the requirements of "Technical standard for disinfection" (2002).

4.Bactericidal test of staphylococcus aureus (carrier method)

The test was repeated three times. The test temperature was $20^{\circ}\text{C}\pm1^{\circ}\text{C}$. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were 0.5min, 1min, 1.5min. The average killing logarithm value of staphylococcus aureus was ≥ 3.00 , which meets the requirements of "Technical standard for disinfection" (2002).

5.Bactericidal test of candida albicans (carrier method)

The test was repeated three times. The test temperature was 20°C±1°C. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were 0.5min 1.5min. The average killing logarithm value of candida albicans was ≥3.00, which meets the requirements of "Technical standard for disinfection" (2002).

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Approver:

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Final audit date:

07/14/2020

Special Sept for Inspection



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Test Report

Sample No.: D2	020568 Report No.: J2019A074	140	Page: 3/12	
Comple name	IBREA MICRO SILVER HAND GEL WITH	Received date:	July 01 2020	
Sample name:	PURE SILVER (ALCOHOL 38%)	Received date:	July 01, 2020	
Itame	Identification test of neutralizer of staphylococcus	Test completion	July 03, 2020	
Items:	aureus (carrier method)	date:	July 03, 2020	

A. Equipment

1.The sample name, batch No.: IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%), 20F001;

2.Test bacterial strain name, bacterial strain No., provide unit and culture generation: staphylococcus aureus, ATCC6538, Guangdong huankai microbiology technology Co., Ltd., the sixth generation;

- 3. Medium and others:
- a. Peptone soy AGAR medium (TSA);b.Peptone soy Broth medium (TSB);c.0.03mol/L pH7.2 Shari agar medium, phosphate buffer (PBS); d. Diluent: normal saline solution containing 0.1% tryptone;e. Composition and concentration of neutralizer: 3.9% D/E neutralization broth;f. Plain white cotton cloth.

4.Instrument name/model/number: Constant thermostatic incubator/DH6000BII/L-516, onstant temperature water bathDK-98-IIA/L-515, vertical steam pressure sterilizer/LDZX-60KSB/L-484, electronic scales/SQP/L-326, microscope/BM2100/L-511, biosafety cabinet/BSC-1500IIA2-X/L-499.

B. Methods

- 1. Test standard: "Technical standard for disinfection" (2002)2.1.1.5.6;
- 2. Identification test of neutralizer of staphylococcus aureus (carrier method):

Bactericidal liquid concentration: The prototype of IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%);

Preparation of staphylococcus aureus suspension: Dilute with normal saline solution containing 0.1% peptone to the desired concentration.

3. The experiment was repeated three times. Test temperature 20°C±1°C.

C. Results

Test temperature $20^{\circ}\text{C}\pm1^{\circ}\text{C}$. The experiment was repeated three times. The action time was 0.5 min. The average number of growth bacteria in the first group is 4cfu/mL. The average number of growth bacteria in the second group is 13 cfu/mL. The average number of growth bacteria in the third group is $3.38\times10^{6}\text{cfu/mL}$. The average number of growth bacteria in the fourth group is $3.52\times10^{6}\text{cfu/mL}$. The average number of growth bacteria in the fifth group is $3.00\times10^{6}\text{cfu/mL}$. The group 6 sterile growth. The error rate between groups 3, 4 and 5 is <15%

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Results of neutralizer identification test

Group	Number of gr	owing bacteria per	test (cfu/mL)	The average
	1	2	3	(cfu/mL)
1	6	5	2	4
2	13	a standard statement 10 and a substitution	17	13
3	3.45×10 ⁶	3.30×10 ⁶	3.40×10 ⁶	3.38×10 ⁶
4	3.75×10 ⁶	2.95×10 ⁶	3.85×10 ⁶	3.52×10 ⁶
5	3.15×10 ⁶	2.75×10 ⁶	3.10×10 ⁶	3.00×10 ⁶
6	0	0	0	0
3.4.5 group average error rate among the three groups (%)	5.80	6.67	7.73	_

Remarks: The negative control group all grew aseptically

D. Conclusion

The test was repeated three times. The test temperature was 20°C±1°C. The results show that 3.9% D/E neutralization broth, can effectively neutralize the effect of residual bactericidal gel on the bacteria surface. And the neutralizing agent and its products had no obvious adverse effect on the experimental bacteria and medium. The results show that the neutralizer is suitable for the prototype of the IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) bactericidal test of escherichia coli and staphylococcus aureus.

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Final audit date:

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Test Report

Sample No.: D2	020568 Report No.: J2019A0	07440	Page: 5/12
Comple nome:	IBREA MICRO SILVER HAND GEL WITH	Received date:	I1 01 2020
Sample name:	URE SILVER (ALCOHOL 38%)		July 01, 2020
Itamas	Identification test of neutralizer of candida	Test completion	I1 02 2020
Items:	albicans (carrier method)	date:	July 03, 2020

A. Equipment

- 1. The sample name, batch No.: IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%), 20F001;
- 2.Test bacterial strain name, bacterial strain No., provide unit and culture generation: candida albicans, ATCC10231, Guangdong huankai microbiology technology Co., Ltd., the sixth generation;
 - 3. Medium and others:
- a. Shari agar medium;b.Liquid Shari medium;c.0.03mol/L pH7.2 Shari agar medium, phosphate buffer (PBS); d. Diluent: normal saline solution containing 0.1% tryptone (TPS) ;e. Composition and concentration of neutralizer: 3.9% D/E neutralization broth;f. Plain white cotton cloth.
- 4.Instrument name/model/number: Constant thermostatic incubator/DH6000BII/L-516, onstant temperature water bathDK-98-IIA/L-515, vertical steam pressure sterilizer/LDZX-60KSB/L-484, electronic scales/SQP/L-326, microscope/BM2100/L-511, biosafety cabinet/BSC-1500IIA2-X/L-499.

B. Methods

- 1. Test standard: "Technical standard for disinfection" (2002)2.1.1.5.6;
- 2. Identification test of neutralizer of candida albicans (carrier method):

Bactericidal liquid concentration: The prototype of IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%);

Preparation of candida albicans suspension: Dilute with normal saline solution containing 0.1% peptone to the desired concentration.

2. The experiment was repeated three times. Test temperature 20°C±1°C.

C. Results

Test temperature 20°C±1°C. The experiment was repeated three times. The action time were 0.5 min. The average number of growth bacteria in the first group is 5cfu/mL. The average number of growth bacteria in the second group is 12cfu/mL. The average number of growth bacteria in the third group is 3.52×10⁶cfu/mL. The average number of growth bacteria in the fourth group is 3.35×10⁶cfu/mL. The average number of growth bacteria in the fifth group is 3.17×10⁶cfu/mL. The group 6 sterile growth. The error rate between groups 3, 4 and 5 is <15%

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Results of neutralizer identification test

Group	Number of gr	owing bacteria pe	r test (cfu/mL)	The average
	1	2	3	(cfu/mL)
1	6	5	3	5
2	12	15	10	12
3	3.15×10 ⁶	3.65×10 ⁶	3.75×10 ⁶	3.52×10 ⁶
4	3.35×10 ⁶	3.15×10 ⁶	3.55×10 ⁶	3.35×10 ⁶
5	3.65×10 ⁶	2.85×10 ⁶	3.00×10 ⁶	3.17×10 ⁶
6	0	0	0	0
3.4.5 group average error rate	5.05	0.00		
among the three groups (%)	5.25	8.98	8.41	

Remarks: The negative control group all grew aseptically

D. Conclusion

The test was repeated three times. The test temperature was 20°C±1°C. The results show that 3.9% D/E neutralization broth, can effectively neutralize the effect of residual bactericidal gel on the bacteria surface. And the neutralizing agent and its products had no obvious adverse effect on the experimental bacteria and medium. The results show that the neutralizer is suitable for the prototype of the IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) bactericidal test of candida albicans.

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Final audit date:

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Sample name: IBREA MICRO SILVER HAND GEL WITH		WITH	agained data	July 01, 2020
Sample name:	PURE SILVER (ALCOHOL 38%)	K	eceived date.	July 01, 2020
Items:	Bactericidal test of escherichia coli (Carrier method)	Test com	pletion date:	July 05, 2020

A. Equipment

- 1.The sample name, batch No.: IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%), 20F001;
- 2.Test bacterial strain name, bacterial strain No., provide unit and culture generation: Escherichia coli, 8099, Guangdong huankai microbiology technology Co., Ltd., the sixth generation;
- 3.Medium and others: Nutrient agar medium, phosphate buffer(0.03mol/L pH7.2); Composition and concentration of neutralizer: 3.9% D/E neutralization broth; Plain white cotton cloth.
- 4.Instrument name/model/number: Constant thermostatic incubator/DH6000BII/L-516, onstant temperature water bathDK-98-IIA/L-515, vertical steam pressure sterilizer/LDZX-60KSB/L-484, microscope/BM2100/L-511, electronic scales/SQP/L-326, biosafety cabinet/BSC-1500IIA2-X/L-499.

B. Methods

- 1. Test standard: "Technical standard for disinfection" (2002) 2.1.1.7.5;
- 2. Bactericidal test of escherichia coli (Carrier method):
- a. Bactericidal liquid concentration: The prototype of IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%);
- b. Preparation of escherichia coli suspension: Dilute with normal saline solution containing 0.1% peptone to the desired concentration.
 - c. The experiment was repeated three times. Test temperature 20°C±1°C.

C. Results

The experiment was repeated three times. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were $0.5 \text{min} \times 1.5 \text{min}$. The average killing logarithm value of e. coli was ≥ 3.00 . Pick up the next page.



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The bactericidal test of escherichia coli

Concentration of active		Mean I	killing pair	value of	The average number of
ingredients in disinfectant			erent time (colonies in the positive
(%)	number	0.5	1	1.5	control group was paired
	1	≥3.00	≥3.00	≥3.00	6.32
Stools colution	2	≥3.00	≥3.00	≥3.00	6.50
Stock solution	3	≥3.00	≥3.00	≥3.00	6.34
	Average value	≥3.00	≥3.00	≥3.00	6.39

Remarks: The negative control group all grew aseptically

D. Conclusion

The test was repeated three times. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were 0.5min, 1min, 1.5min. The average killing logarithm value of escherichia coli was ≥ 3.00 , which meets the requirements of "Technical standard for disinfection" (2002)2.1.1.7.7.

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Final audit date:

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Test Report

Sample No.: D2	020568 Report No.: J2019A0	07440	Page: 9/12	
Sample name:	IBREA MICRO SILVER HAND GEL WITH	Danier d date	I1 01 2020	
Sample name: PURE SILVE	PURE SILVER (ALCOHOL 38%)	Received date:	July 01, 2020	
Items:	Bactericidal test of staphylococcus aureus	Test completion	Into 05, 2020	
Items.	(Carrier method)	date:	July 05, 2020	

A. Equipment

- 1.The sample name, batch No.: IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%), 20F001;
- 2.Test bacterial strain name, bacterial strain No., provide unit and culture generation: staphylococcus aureu, ATCC6538, Guangdong huankai microbiology technology Co., Ltd, the sixth generation;
- 3.Medium and others: Nutrient agar medium, phosphate buffer(0.03mol/L pH7.2); Composition and concentration of neutralizer: 3.9% D/E neutralization broth; Plain white cotton cloth.
- 4.Instrument name/model/number: Constant thermostatic incubator/DH6000BII/L-516, onstant temperature water bathDK-98-IIA/L-515, vertical steam pressure sterilizer/LDZX-60KSB/L-484, microscope/BM2100/L-511, electronic scales/SQP/L-326, biosafety cabinet/BSC-1500IIA2-X/L-499.

B. Methods

- 1. Test standard: "Technical standard for disinfection" (2002) 2.1.1.7.5;
- 2. Bactericidal test of staphylococcus aureus(Carrier method):
- a. Bactericidal liquid concentration: The prototype of IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%); Qianyi Testing and English and Engl
- b. Preparation of staphylococcus aureus suspension: Dilute with normal saline solution containing 0.1% peptone to the desired concentration.
 - c. The experiment was repeated three times. Test temperature 20°C±1°C.

C. Results

The experiment was repeated three times. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were $0.5 \text{min} \cdot 1 \text{min} \cdot 1.5 \text{min}$. The average killing logarithm value of staphylococcus aureus ≥ 3.00 . Pick up the next page.



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The bactericidal test of staphylococcus aureus

Concentration of active ingredients in disinfectant		Mean killing pair value of different time (min)		The average number of colonies in the positive	
(%)	number	0.5	1	1.5	control group was paired
Stock solution	-1	≥3.00	≥3.00	≥3.00	6.30
	2	≥3.00	≥3.00	≥3.00	6.36
	3	≥3.00	≥3.00	≥3.00	6.35
	Average value	≥3.00	≥3.00	≥3.00	6.34

Remarks: The negative control group all grew aseptically

D. Conclusion

The test was repeated three times. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were 0.5min、1min、1.5min. The average killing logarithm value of staphylococcus aureus was ≥3.00, which meets the requirements of "Technical standard for disinfection" (2002)2.1.1.7.7.

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Approver:

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Final audit date:

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Test Report

Sample No.: D2	020568 Report No	o.: J2019A07440	Page: 11/12
Comple nome.	IBREA MICRO SILVER HAND GEL	WITH	I-1 01 2020
Sample name: PURE	PURE SILVER (ALCOHOL 38%)	Received date:	July 01, 2020
Items:	Bactericidal test of candida albicans	Test completion	Inl. 05 2020
Items.	(Carrier method)	date:	July 05, 2020

A. Equipment

1.The sample name, batch No.: IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%), 20F001;

2.Test bacterial strain name, bacterial strain No., provide unit and culture generation: candida albicans, ATCC10231, Guangdong huankai microbiology technology Co., Ltd, the sixth generation;

3.Medium and others: Nutrient agar medium, phosphate buffer(0.03mol/L pH7.2); Composition and concentration of neutralizer: 3.9% D/E neutralization broth; Plain white cotton cloth.

4.Instrument name/model/number: Constant thermostatic incubator/DH6000BII/L-516, onstant temperature water bathDK-98-IIA/L-515, vertical steam pressure sterilizer/LDZX-60KSB/L-484, microscope/BM2100/L-511, electronic scales/SQP/L-326, biosafety cabinet/BSC-1500IIA2-X/L-499.

B. Methods

- 1. Test standard: "Technical standard for disinfection" (2002) 2.1.1.9.5;
- 2. Bactericidal test of candida albicans(Carrier method):
- a. Bactericidal liquid concentration: The prototype of IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%); Clanvi Testing and Evaluation
- b. Preparation of candida albicans suspension: Dilute with normal saline solution containing 0.1% peptone to the desired concentration.
 - c. The experiment was repeated three times. Test temperature 20°C±1°C.

C. Results

The experiment was repeated three times. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were 0.5 min. 1 min. 1.5 min. The average killing logarithm value of candida albicans was ≥ 3.00 . Pick up the next page.



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The bactericidal test of candida albicans

Concentration of active ingredients in disinfectant		Mean killing pair value of different time (min)		The average number of colonies in the positive	
(%)	number	0.5	1	1.5	control group was paired
	1	≥3.00	≥3.00	≥3.00	6.50
0(-1-1-1-1	2	≥3.00	≥3.00	≥3.00	6.47
Stock solution	3	≥3.00	≥3.00	≥3.00	6.37
	Average value	≥3.00	≥3.00	≥3.00	6.45

Remarks: The negative control group all grew aseptically

D. Conclusion

The test was repeated three times. The results showed that IBREA MICRO SILVER HAND GEL WITH PURE SILVER (ALCOHOL 38%) were the carrier prototype. The action time were 0.5 min, 1 min, 1.5 min. The average killing logarithm value of candida albicans was ≥ 3.00 , which meets the requirements of "Technical standard for disinfection" (2002).

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Approver:

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Final audit date:

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