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CUSTOMER

MOISTURE 22 CO., LTD.

No. 10, Ln. 231, Sec. 1, Nankan Rd., Luzhu Dist., Taoyuan City 338, Taiwan (R.O.C.)

Sample name : Antibacterial Solution(Fog Liquid)

Manufacturer : -Manufacture Date : -Lot number : -Sample Condition : Room Temperature Sample delivering : By applicant Contact Person : Miss Yu Phone Number : (03)322-5829#318

Sample expiry Date : -Country of origin : -Test sample packaging : as Appendix Number of Samples : 1 Piece Report purpose : For Export \ Research and development R&D

----- The sample information provided above was confirmed by the customer ------

Sample Received : 2020/07/08 Date of Testing : 2020/07/10

Item (s)	Result (s)	Unit	Method	LOQ / LOD
Bactericidal Activities : Escherichia coli	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterialproducts - Test for antibacteria activity and efficacy. 2. Russel A. D., Hugo V B., Ayliffe G. A. J. 2004. Principles and Practice of Disinfection, Preservation and Sterilization. Fourth Edition. Malden, MA : Blackwell Science. Chapter 7, p.223 ~ p.228.	
Bactericidal Activities : Staphylococcus aureus	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterialproducts - Test for antibacteria activity and efficacy. 2. Russel A. D., Hugo V B., Ayliffe G. A. J. 2004. Principles and Practice of Disinfection, Preservation and Sterilization. Fourth Edition. Malden, MA : Blackwell Science. Chapter 7, p.223 ~ p.228.	







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Sample name : Antibacterial Solution(Fog Liquid)

Manufacturer : -Manufacture Date : -Lot number : -Sample Condition : Room Temperature Sample delivering : By applicant Contact Person : Miss Yu Phone Number : (03)322-5829#318

Sample expiry Date : -Country of origin : -Test sample packaging : as Appendix Number of Samples : 1Piece Report purpose : For Export \ Research and development R&D

----- The sample information provided above was confirmed by the customer ------

Sample Received : 2020/07/08

Date of Testing : 2020/07/10

Item (s)	Result (s)	Unit	Method	LOQ / LOD
Bactericidal Activities : Pseudomonas aeruginosa	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterialproducts - Test for antibacterial activity andefficacy. 2.Russel A. D., Hugo V B., Ayliffe G. A. J. 2004. Principles and Practice of Disinfection, Preservation and Sterilization. Fourth Edition. Malden, MA : Blackwell Science. Chapter 7, p.223 ~ p.228.	— V
Bactericidal Activities : Candida albicans	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterialproducts - Test for antibacterial activity and efficacy. 2.Russel A. D., Hugo V B., Ayliffe G. A. J. 2004. Principles and Practice of Disinfection, Preservation and Sterilization. Fourth Edition. Malden, MA : Blackwell Science. Chapter 7, p.223 ~ p.228.	







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Sample name : Antibacterial Solution(Fog Liquid)

Manufacturer : -Manufacture Date : -Lot number : -Sample Condition : Room Temperature Sample delivering : By applicant Contact Person : Miss Yu Phone Number : (03)322-5829#318

----- The sample information provided above was confirmed by the customer ------

Sample Received : 2020/07/08 Date of Testing : 2020/07/10

Date of Report : 2020/08/03

Item (s)	Result (s)	Unit	Method	LOQ / LOD
Bactericidal Activities : Aspergillus brasiliensis	>99.99	%	 Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterialproducts - Test for antibacteria activity and efficacy. 2.Russel A. D., Hugo B., Ayliffe G. A. J. 2004. Principles and Practice of Disinfection, Preservation and Sterilization. Fourth Edition. Malden, MA = Blackwell Science. Chapter 7, p.223 ~ p.228. 	W

----- Null below ------

Remark (s) :

- This report is used only for providing the testing results of commissioned items, not for determining the legality of the product.
- Annotation from customer requirement : FLE-05(FLE-XXX(X=1-999))
- · Bactericidal Activities: Please see the test appendix for detailed inspection results.
- Please note if the tests do not involve sampling, then the test report is only responsible for the test sample provided by the customer. And the report is invalid if not presented in full and for reference only; it shall not be used for advertising, sales promotions, or notarial purposes. Also, when the target is below the limit of detection (LOD) or the limit of quantification (LOQ), the test results will be expressed as "Negative" or "ND" (Not detected).



uch-tin Yueh-ting Tsai, Ph. D.

uen-ting Isai, Ph. D. Approval Signatory





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Sample name : Antibacterial Solution(Fog Liquid) Sample Condition : Room Temperature Sample Received : 2020/07/08 Date of

Date of Testing : 2020/07/10





Juch-ting 1saí Yueh-ting Tsai, Ph. D. Approval Signatory





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Sample name : Antibacterial Solution(Fog Liquid) Sample Condition : Room Temperature Sample Received : 2020/07/08 Date of

Date of Testing : 2020/07/10









Appendix

- 1. Specimen I.D: M61-200700497
- 2. Test method:
 - 2.1 Test strains:
 - 2.1.1 Escherichia coli, ATCC 8739.
 - 2.1.2 Staphylococcus aureus, ATCC 6538P.
 - 2.1.3 Pseudomonas aeruginosa, ATCC 9027.
 - 2.1.4 Candida albicans, ATCC 10231.
 - 2.1.5 Aspergillus brasiliensis, ATCC 16404.
 - 2.2 Test condition: $25 \pm 2^{\circ}$ C for 30 minute.
 - 2.3 Culture condition:
 - 2.3.1 Bacteria: $35 \pm 2^{\circ}C$ for 48 ± 2 hours.
 - 2.3.2 Yeast: $25 \pm 2^{\circ}C$ for 3 days.
 - 2.3.3 Mold: $25 \pm 2^{\circ}C$ for 5 days.
 - 2.4 Reference:
 - 2.4.1 Refer to JIS Z2801:2012.
 - 2.4.2 Russel A. D., Hugo W. B., Ayliffe G. A. J. 2004. Principles and Practice of Disinfection, Preservation and Sterilization. Fourth Edition. Malden, MA : Blackwell Science. Chapter 7, p.223 ~ p.228.
 - 2.5 Grouping:
 - 2.5.1 Test group: Test substances provided by customers.
 - 2.5.2 Control group: 0.85% sterile saline.
 - 2.6 Prepare the suspension of test bacteria, and the concentration was around 10⁷ CFU/mL.
 - 2.7 Add 0.1 mL of bacteria suspension into 10 mL test and control group.
 - 2.8 Incubated test and control group at $25 \pm 2^{\circ}$ C for 30 minute.
 - 2.9 The test group and control group were conducted for 10-fold serial dilution with sterile saline.
 - 2.10 After serial dilution, each group were inoculated on appropriate medium. The medium were cultured under the test condition. The growths were observed and colony counts were recorded.
 - 2.11 Calculation:

Reduction rate (%) = (Control group – Test group) Control group × 100%



Appendix

3. Result:



Figure 1: Test article.



Figure 2: Result of control group and test group against *E. coli* for 30 minute.

P. aeruginosa M61-200700497

10°



Figure 3: Result of control group and test groupFigure 4: Result of control group and test groupagainst S. aureus for 30 minute.against P. aeruginosa for 30 minute.



Appendix

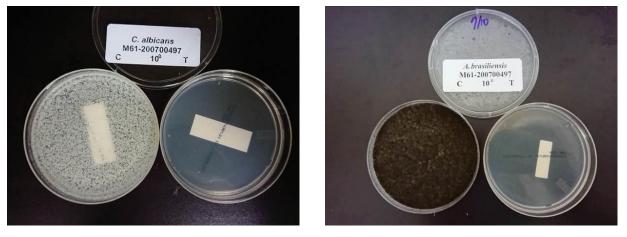


Figure 5: Result of control group and test group Figure 6: Result of control group and test group against *C. albicans* for 30 minute. against *A. brasiliensis* for 30 minute.

Table 1. Result of test group (M61-200700497) against E. coli · S. aureus · P. aeruginosa ·C. albicans and A. brasiliensis for 30 minute.

Test strain	Inoculated concentration	The residual amo (CFU)	Rate		
	(CFU/mL)	Control group	Test group	- (%)	
E. coli	1.6x10⁵	2.5x10⁵	<5	>99.99	
S. aureus	1.6x10⁵	1.7x10⁵	<5	>99.99	
P. aeruginosa	1.6x10⁵	1.6x10⁵	<5	>99.99	
C. albicans	4.2x10⁵	6.2x10⁵	<5	>99.99	
A. brasiliensis	5.8x10⁵	6.3x10⁵	<5	>99.99	