



Report NO. : M61-200400560R01EN
 (Replace the original report of: M61-200400560R01)



TEST REPORT

SUPERLAB TESTING CENTER

CUSTOMER

MOISTURE 22 CO., LTD.

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

Page 1 of 4

Sample name : FLV-05 Antibacterial Solution/0.5 liters

Manufacturer : MOISTURE 22 CO., LTD.

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 : Taiwan

Test sample packaging : Loose Packaging

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 : 2020/04/14

Date of Testing : 2020/04/16

Date of Report : 2020/05/12

Item (s)	Result (s)	Unit	Method	LOQ / LOD
Bactericidal Activities : <i>Escherichia coli</i>	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterial products - Test for antibacterial activity and efficacy. 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.	—
Bactericidal Activities : <i>Staphylococcus aureus</i>	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterial products - Test for antibacterial activity and efficacy. 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.	—

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連結至台美安全家



Yueh-ting Tsai

Yueh-ting Tsai, Ph. D.
 Approval Signatory



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Sample name : FLV-05 Antibacterial Solution/0.5 liters

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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 : Taiwan

Test sample packaging : Loose Packaging

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 : 2020/04/14

Date of Testing : 2020/04/16

Date of Report : 2020/05/12

Item (s)	Result (s)	Unit	Method	LOQ / LOD
Bactericidal Activities : <i>Pseudomonas aeruginosa</i>	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterial products - Test for antibacterial activity and efficacy. 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.	—
Bactericidal Activities : <i>Candida albicans</i>	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterial products - Test for antibacterial activity and efficacy. 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.	—

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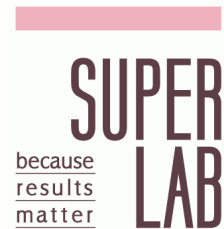


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Sample name : FLV-05 Antibacterial Solution/0.5 liters

Manufacturer : MOISTURE 22 CO., LTD.

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 : Taiwan

Test sample packaging : Loose Packaging

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 : 2020/04/14

Date of Testing : 2020/04/16

Date of Report : 2020/05/12

Item (s)	Result (s)	Unit	Method	LOQ / LOD
Bactericidal Activities : <i>Aspergillus brasiliensis</i>	>99.99	%	1. Refer to Japanese Industrial Standard (JIS) Z 2801 (2012) Antibacterial products - Test for antibacterial activity and efficacy. 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.	—

----- 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 : FLV-05(FLV-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).

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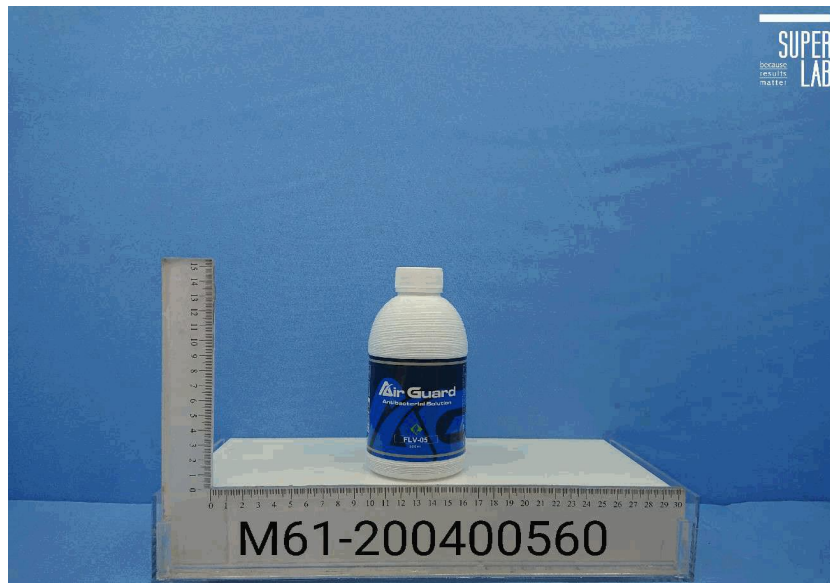
Sample name : FLV-05 Antibacterial Solution/0.5 liters

Sample Condition : Room Temperature

Sample Received : 2020/04/14

Date of Testing : 2020/04/16

Date of Report : 2020/05/12



Z000-00



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Appendix

1. Specimen information:
 - 1.1 Client Specimen I.D: "FLV-05 Antibacterial Solution/0.5 liters"
 - 1.2 Specimen I.D: M61-200400560
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 ± 2°C for 30 minutes.
 - 2.3 Culture condition:
 - 2.3.1 Bacteria: 35 ± 2°C for 48 ± 2 hours.
 - 2.3.2 Yeast: 25 ± 2°C for 3 days.
 - 2.3.3 Mold: 25 ± 2°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: FLV-05 Antibacterial Solution/0.5 liters.
 - 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 ± 2°C for 30 minutes.
 - 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:

$$\text{Reduction rate (\%)} = \frac{(\text{Control group} - \text{Test group})}{\text{Control group}} \times 100\%$$



Appendix

3. Result:

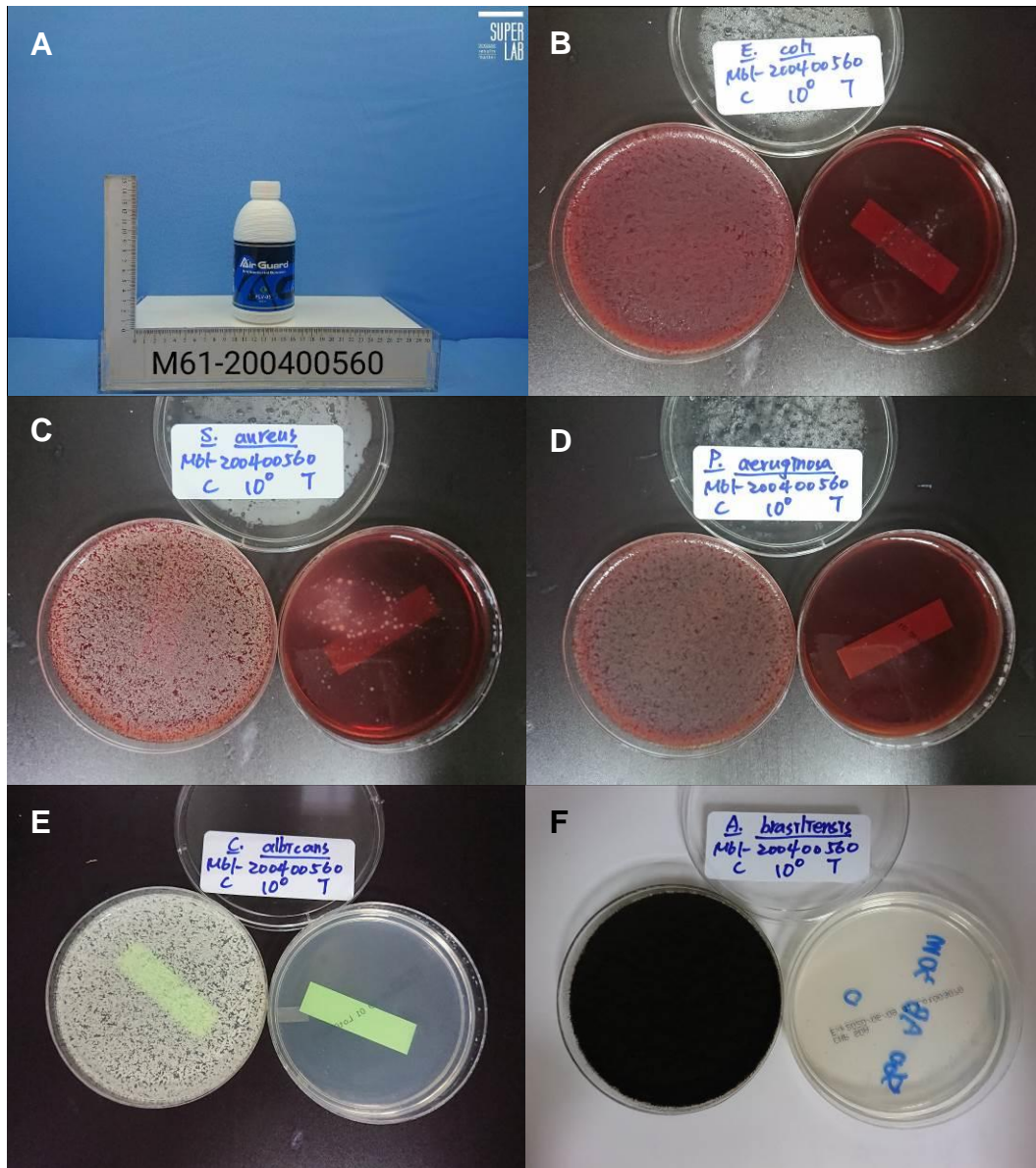


Figure 1. Result of test article (M61-200400560) against *Escherichia coli* , *Staphylococcus aureus* , *Pseudomonas aeruginosa* , *Candida albicans* and *Aspergillus brasiliensis* for 30 minutes.

- A. Test article.
- B. Result of control group and test group against *Escherichia coli* for 30 minutes.
- C. Result of control group and test group against *Staphylococcus aureus* for 30 minutes.
- D. Result of control group and test group against *Pseudomonas aeruginosa* for 30 minutes.
- E. Result of control group and test group against *Candida albicans* for 30 minutes.
- F. Result of control group and test group against *Aspergillus brasiliensis* for 30 minutes



Appendix

**Table 1. Result of test group (M61-200400560) against *Escherichia coli* ,
Staphylococcus aureus , *Pseudomonas aeruginosa* , *Candida albicans*
and *Aspergillus brasiliensis* for 30 minutes.**

Test strain	Inoculated concentration (CFU/mL)	The residual amount of bacteria (CFU/mL)		Rate (%)
		Control group	Test group	
<i>E. coli</i>	1.6x10 ⁵	1.1x10 ⁶	<5	>99.99
<i>S. aureus</i>	4.6x10 ⁵	4.8x10 ⁵	<5	>99.99
<i>P. aeruginosa</i>	1.4x10 ⁵	1.8x10 ⁵	<5	>99.99
<i>C. albicans</i>	4.8x10 ⁵	4.8x10 ⁵	<5	>99.99
<i>A. brasiliensis</i>	2.9 x10 ⁵	1.8x10 ⁵	<5	>99.99