

**Test Report****Report No.:** GZAFN160301067X-4**Date:** Apr 06 2016

Client name: KEPUYIN BIO CO., LTD.
Client address: No.61 Xia Nan Road, Guicheng Street, Nanhai District,
Foshan City
Sample name: KP-J81 (ABS)
Sample Batch No.: /
Product Date: /
Manufacturer: GOOD NICE ANTI-MOLD CO. , LTD
Sample other information: Add KP-J81 antibacterial agent provided by KEPUYIN BIO CO., LTD.

Above sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Sample No. GZAFN160301067X-4
SGS reference No. /
Date of sample received: Mar. 25, 2016
Testing period: Mar. 25, 2016 ~ Apr. 05, 2016

TEST(S) REQUESTED:
Selected test(s) as requested by the applicant

TEST METHOD(S):
Please refer to next page(s)

TEST RESULT(S):
Please refer to next page(s)

SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch



SGS Authorized Signature
Winnie Lee

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Page 1 of 3

RAND: 4873609

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Member of the SGS Group (SGS SA)

TEST RESULT(S):

A: Assessment of Antimicrobial activity

Test method: With reference to JIS Z 2801:2010

Test organism: *Escherichia coli* ATCC 8739, *Staphylococcus aureus* ATCC 6538P

Name of test bacteria (Strain number)	Concentration of bacteria (cfu/mL)	Volume of test inoculum (mL)	The average of the common logarithm of the number of viable bacteria(cfu/cm ²) that recovered from the different contact time			Value of antimicrobial activity
			/	at "0h" contact time	at "24h" contact time	
<i>Escherichia coli</i> ATCC 8739	1.0x10 ⁶	0.2	Sample	/	-0.20	5.3
			Control Sample	4.12	5.11	
<i>Staphylococcus aureus</i> ATCC 6538P	1.1x10 ⁶	0.2	Sample	/	-0.20	4.8
			Control Sample	4.08	4.58	

Remark: The control sample is plastic film without antimicrobial activity, provided by SGS laboratory.

B: Test of antimicrobial activity

Test method: With reference to ISO 22196:2011

Test organism: *Staphylococcus aureus* ATCC 6538P, *Escherichia coli* ATCC 8739

Test Organism(s)	Concentration of bacteria (cfu/mL)	Volume of test inoculum (mL)	The log value of the number(cfu/cm ²) that bacteria recovered from the different contact time			The value of antimicrobial activity
			/	at "0h" contact time	at "24h" contact time	
<i>Staphylococcus aureus</i> ATCC 6538P	1.1x10 ⁶	0.2	Sample	/	-0.21	4.8
			Control Sample	4.08	4.58	
<i>Escherichia coli</i> ATCC 8739	1.0x10 ⁶	0.2	Sample	/	-0.21	5.3
			Control Sample	4.11	5.11	

Remark: The control sample is plastic film without antimicrobial activity, provided by SGS laboratory.

C: Determine the antimicrobial activity of the submitted sample in 18 hour(s)

Test method:With reference to ASTM E 2149-2013a

Test organism(s): *Staphylococcus aureus* ATCC 6538, *Escherichia coli* ATCC 25922

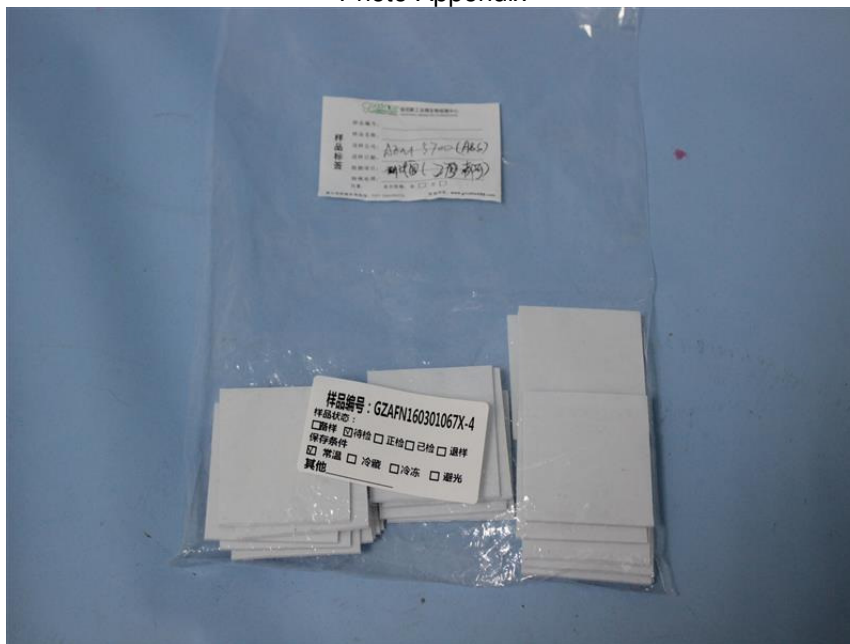
Name of test organism	The number of bacteria recovered from (CFU/mL)			Reduction %
	/	"0"contact time	"18h"contact time	
<i>Staphylococcus aureus</i> ATCC 6538	Sample (1g)	/	< 1.0x10 ⁰	> 99
	Inoculum only control	2.4x10 ⁵	4.2x10 ⁵	

Name of test organism	The number of bacteria recovered from (CFU/mL)			Reduction %
	/	"0"contact time	"18h"contact time	
<i>Escherichia coli</i> ATCC 25922	Sample (1g)	/	4.0×10 ⁰	> 99
	Inoculum only control	1.7×10 ⁵	2.5×10 ⁴	

Remark: The reduction calculations are based on values from inoculum only control.

SAMPLE DESCRIPTION: Sample in bag

Photo Appendix



SGS authenticate the photo on original report only
*** End of Report ***