

Test Report		ASH20-017412-02	Date: 19 May 2020		
Client Address: E	DEPARTMENT STO	o Bro PVC(Hebei Brother Hao Plastics Products Co.,Ltd.) PARTMENT STORE SECTION,JINBAO ROAD SOUTH SIDE,DACHENG UNTY,LANGFANG CITY,HEBEI PROVINCE,CHINA.			
Sample Name: Manufacturer: Sample Batch No.: Production Date:		Anti-Bacteria / Mold-Resistance PVC Strip(Sheet) Hao Bro PVC(Hebei Brother Hao Plastics Products Co.,Ltd.) / /			
	• • • •	were submitted and certified by the client, S lequacy and/or completeness.	GS quoted the information with		
SGS Reference No	D. :	TJHL2004001637SD			
Date of Sample Re	eceived :	20 Apr 2020			
Testing Period :		20 Apr 2020 - 19 May 2020			

Test Requested :

Test Method :

Test Result(s) :

Chinese shall prevail in this report.

Please refer to next page(s).

Please refer to next page(s).

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Selected test(s) as requested by client.





SGS Authorized Signature

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Test Report		ASH20-017412-02	Date: 19 May 2020			
Sample Description :						
Specimen No.	SGS Sample ID	Description				
1	ASH20-017412.001	sample in bag				
Test Result(s) :						
Test Requested	: Test of antimicrobia	Test of antimicrobial activity				
Test Method :	ISO 22196:2011 Measurement of antibacterial activity on plastics and other non-porous surfaces					

## ASH20-017412-02.001

Test organism	Escherichia coli ATCC 8739	Staphylococcus aureus ATCC 6538P
Concentration of bacteria (CFU/mL)	7.0x10^5	7.6x10^5
Volume of test inoculum (mL)	0.4	0.4
U₀	4.23	4.86
Ut	5.52	5.92
At	3.44	3.91
R	2.1	2.0
*The antibacterial activity rate (%)	99.2	99.0

Notes :

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

2.U<sub>0</sub>: the average of the common logarithm of the number of viable bacteria(CFU/cm<sup>2</sup>) recovered from the untreated test specimens immediately after inoculation.

3.Ut: the average of the common logarithm of the number of viable bacteria(CFU/cm<sup>2</sup>) recovered from the untreated test specimens after 24 h.

4.At: the average of the common logarithm of the number of viable bacteria(CFU/cm<sup>2</sup>) recovered from the treated test specimens after 24 h.

5.R: the value of antimicrobial activity,R=Ut-At.

6.\* The calculation formula of the antibacterial activity rate is provided by the client, the calculation formula is (B-C)/B \*100%;

B: arithmetic average of the numbers of bacteria obtained from control samples after 24 h incubation(CFU/cm<sup>2</sup>);

C: arithmetic average of the numbers of bacteria obtained from samples after 24 h incubation(CFU/cm<sup>2</sup>).

7. The sample is not processed and tested directly.

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## Test Report

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Date: 19 May 2020

Sample photo:



SGS authenticate the photo on original report only

\*\*\* End \*\*\*

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