

| 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.U₀: the average of the common logarithm of the number of viable bacteria(CFU/cm²) recovered from the untreated test specimens immediately after inoculation.

3.Ut: the average of the common logarithm of the number of viable bacteria(CFU/cm²) recovered from the untreated test specimens after 24 h.

4.At: the average of the common logarithm of the number of viable bacteria(CFU/cm²) 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/cm²);

C: arithmetic average of the numbers of bacteria obtained from samples after 24 h incubation(CFU/cm²).

7. The sample is not processed and tested directly.

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Sample photo:



SGS authenticate the photo on original report only

*** End ***

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