

TEST REPORT

No. : XMIN2105005473CM

Date : Jul 09, 2021

Page: 1 of 4

scan to see the report



XMIN2105005473CM

CUSTOMER NAME: HENAN XIEREN SAFETY SCREENS CO.,LTD.
ADDRESS: KANGCUN INDUSTRIAL ZONE, XINXIANG CITY, HE'NAN
PROVINCE, CHINA

Sample Name : PVC ANTI-MICROBIAL CURTAIN

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

SGS Ref. No. : GZF21-013498-01
Date of Receipt : May 25, 2021
Testing Start Date : May 25, 2021
Testing End Date : Jul 09, 2021
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Services Co. , Ltd Xiamen Branch
Testing Center

Bryan

Bryan Hong
Authorized signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Xiamen Branch Testing Center Commercial Construction Material Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgs.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

TEST REPORT

No. : XMIN2105005473CM

Date : Jul 09, 2021

Page: 2 of 4

Sample Description

∴

Specimen No.	SGS Sample ID.	Description.
1.	001	Block sample.

Test Result(s) :

Test Requested : Antimicrobial activity test

Test Method : ASTM G 21-15 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi

001

Test organism(s)	Concentration of spores (spores/mL)	Rating observed growth on specimens (after 28 days)
*Test organism	1.0x 10 ⁶	0 Grade

Notes :

*Test organism

Aspergillus brasiliensis ATCC 9642, Penicillium funiculosum ATCC 11797, Chaetomium globosum ATCC 6205, Trichoderma virens CICC 2535(equate to ATCC 9645), Aureobasidium pullulans ATCC 15233

History name of test organism

Aspergillus brasiliensis Historically known as A.niger.

Penicillium funiculosum Historically known as P.pinophilum.

Trichoderma virens Historically known as Gliocladium virens.

According to ASTM G 21-15 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi, observed fungi growth rating on the specimens include:

0-None

1-Traces of growth (less than 10%)

2-Light growth (10 to 30%)

3-Medium growth (30 to 60%)

4-Heavy growth (60% to complete coverage)

The microscope(50 X) was used to confirm the observation.



SGS-CTC (Shanghai) Technical Services Co., Ltd.
Xiamen Branch Testing Center Commercial Construction Material Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

TEST REPORT

No. : XMIN2105005473CM

Date : Jul 09, 2021

Page: 3 of 4

Test Requested : Assessment of Antimicrobial activity

Test Method : ASTM E 2180-18 Standard test method for determining the activity of Incorporated antimicrobial agent(s) in polymeric or hydrophobic materials

001

Test organism(s) ATCC	Staphylococcus aureus ATCC 6538	Candida albicans ATCC 10231	Escherichia coli 25922
Test inoculum (cells/mL)	1.8x10 ⁶	1.2x10 ⁶	1.8x10 ⁶
Control Sample-0 h (cfu/cm ²)	8.7x10 ⁵	6.0x10 ⁵	8.5x10 ⁵
Control Sample-24 h (cfu/cm ²)	3.5x10 ⁷		2.5x10 ⁷
Control Sample-96 h (cfu/cm ²)		8.9x10 ⁶	
Sample-24 h (cfu/cm ²)	2.6x10 ⁶		2.5x10 ²
Sample-96 h (cfu/cm ²)		7.9x10 ⁵	
Reduction (%)	92.6	91.1	>99.9

Notes :

- 1.The control sample is plastic film without antimicrobial activity, provided by SGS laboratory.
- 2.According to client's requirement, test item Escherichia coli ATCC 25922 was tested with reference to ASTM E 2180-18 .
3. The above test project/method was carried out by subcontractors.



SGS-CTC (Shanghai) Technical Services Co., Ltd.
Xiamen Branch Testing Center Commercial Construction Material Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com

TEST REPORT

No. : XMIN2105005473CM

Date : Jul 09, 2021

Page: 4 of 4

Sample photo:



***** End of report*****



SGS-CTC (Shanghai) Technical Services Co., Ltd.
Xiamen Branch Testing Center Commercial Construction Material Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.31 Xianghong Road, Xiang'an Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgsgroup.com.cn
中国·福建·厦门·火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 f (86-592) 5765380 e sgs.china@sgs.com