Pet's Mattress

BLESSTAR ® EVER ECOLAR®

Samples:

Three new kinds of Pet's Mattress with antimicrobial and deodorant properties are developed successfully.

Standards: AATCC 100-2019, ISO 18184-2019

Odor test of BLESSTAR treated deodorizing fabrics
(GB/T 33610.2-2017，China**)**

广 微 测
Gmicro Testing

GUANGDONG DETECTION CENTER OF MICROBIOLOGY

ANALYSIS AND TEST RESULT

Report №.: 2023FM12489R01E

Pollutants	Action time	Result		Odour reduction rate (%)
		The average of the concentration of testing gas without a specimen (μL/L)	The average of the concentration of testing gas with a specimen (μL/L)	
Ammonia	2h	87.0	<0.5	>99

Antimicrobial properties of Pet's Mattress

BLESSTAR ®
EVER ECOLAR®

Executive summary
The sample was tested to the following standard and the data provided is for informational purposes only.

'- AATCC 100-2019: Quantitative Determination of Antibacterial Finishes on Textile Materials

Method Summary
The anti-bacterial properties were evaluated using AATCC 100-2019: Quantitative Determination of Antibacterial Finishes on Textile Materials.
The following organisms were used for this test:
Staphylococcus aureus (ATCC strain no. 6538) and Klebsiella pneumoniae (ATCC strain no. 4352).

Test samples were inoculated with the test organisms. After incubation, the bacteria were eluted from the samples by shaking in known amounts of neutralizing solution. The number of bacteria present in this liquid was determined, and the percentage reduction by the treated specimen was calculated.

RESULTS:
Tested Component: (A) Light golden fabric

Percent Reduction (%)

Name of bacteria used for test	*Staphylococcus aureus*	*Klebsiella pneumoniae*
Percent Reduction (%)	≥99.91	≥99.93
Comment	For information only	

Recovery of Bacteria

Name of bacteria used for test		Staphylococcus aureus	Klebsiella pneumoniae
The number of bacteria recovered from the inoculated untreated test specimen swatches immediately after inoculation (at "0" contact time)		Not available*	Not available*
The number of bacteria recovered from the inoculated untreated test specimen swatches incubated over 24 hours contact period	(B)	Not available*	Not available*
The number of bacteria recovered from the inoculated treated test specimen swatches immediately after inoculation (at "0" contact time)	(C)	107,500	150,000
The number of bacteria recovered from the inoculated treated test specimen swatches incubated over the 24 hours contact period	(A)	LT100	LT100
The number of bacteria recovered from the inoculated viability control swatches incubated over the 24 hours contact period		310,000,000	460,000,000

C/N

Executive summary
The sample was tested to the following standard and the data provided is for informational purposes only.

'- AATCC 100-2019: Quantitative Determination of Antibacterial Finishes on Textile Materials

Method Summary
The anti-bacterial properties were evaluated using AATCC 100-2019: Quantitative Determination of Antibacterial Finishes on Textile Materials.
The following organisms were used for this test: Candida albicans (ATCC strain no. 10231)

Test samples were inoculated with the test organisms. After incubation, the yeast were eluted from the samples by shaking in known amounts of neutralizing solution. The number of yeast present in this liquid was determined, and the percentage reduction by the treated specimen was calculated.

RESULTS:
Tested Component: (A) Light golden fabric

Percent Reduction (%)

Name of Yeast used for test	*Candida albicans*
Percent Reduction (%)	≥99.99
Comment	For information only

Recovery of Bacteria

Name of Yeast used for test		*Candida albicans*
The number of yeast recovered from the inoculated untreated test specimen swatches immediately after inoculation (at "0" contact time)		182,000
The number of yeast recovered from the inoculated untreated test specimen swatches incubated over 24 hours contact period	(B)	925,000
The number of yeast recovered from the inoculated treated test specimen swatches immediately after inoculation (at "0" contact time)	(C)	148,000
The number of yeast recovered from the inoculated treated test specimen swatches incubated over the 24 hours contact period	(A)	LT100
The number of yeast recovered from the inoculated viability control swatches incubated over the 24 hours contact period		2,800,000

C/N

Executive summary

The sample(s) MEET the following requirement(s):
'- ISO 18184:2019 Textiles – Determination of antiviral activity of textile products using Influenza A virus (H3N2), ATCC #VR-1679 with the contact time of 2 hours.

Method Summary:
The antiviral properties were evaluated using ISO 18184:2019 Textiles – Determination of antiviral activity of textile products of the following condition.

Virus strain: Influenza A virus (H3N2), ATCC #VR-1679 / host cell: MDCK cell, ATCC #CCL-34
Test contact time: 2 hours

The viruses were deposited onto a specimen. After specific contact time, the remaining infectious virus was counted, and the reduction rate was calculated by the comparison between the antiviral product test specimen and the control specimen by common logarithm. Plaque assay was used to quantify the infectious virus titre.

Result:
Tested Component: Light golden yellow fabric

Antiviral activity value

The virus infective titre of inoculated concentration for the test	(PFU/ml)	19,000,000
Logarithm reduction value of infectivity titre of control specimen* $(M) = \lg(Va) - \lg(Vb)$	(M)	0.93
Common logarithm average of 3 infectivity titre value immediate after inoculation of the control specimen (t_0)	$\lg(Va)$	7.28
Common logarithm average of 3 infectivity titre value after designated contact time with the control specimen (t_{inc})	$\lg(Vb)$	6.35
Common logarithm average of 3 infectivity titre value after designated contact time with the antiviral fabric specimen (t_{inc})	$\lg(Vc)$	≤3.00
Antiviral activity value* $Mv = \lg(Va) - \lg(Vc)$	(Mv)	≥4.28
Antiviral activity value in percent		≥99.99%
Conclusion		Pass

* Express in logarithm number

C/N