



During the period of October 17 to November 2, 2018, Hopkins Medical Products conducted a test of antimicrobial activity (JIS L 1902) on its Microban® coated proprietary fabric in an independent lab. After an 18-hour exposure with comparison to a control specimen, both Staphylococcus Aureus (ATCC 6538) and Escherichia Coli (ATCC 8739) samples were found reduced by more than 99%.

## TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : HLO0358/2018

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Date: NOV. 02, 2018

### Hopkins Medical Products

**The following merchandise was submitted and identified by the applicant as:**

Product Description: Tetoron Cotton Blend

Country of Origin: Taiwan

**We have tested the submitted sample(s) as requested and the following results were obtained:**

Test Requested: Antibacterial activity (JIS L 1902)

Test Method & Result: ---See following sheet(s)---

Date of Receipt: OCT. 17, 2018

Testing Period: OCT. 17, 2018 – NOV. 02, 2018

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**Test Method & Result:**

Test Organism:	<i>Staphylococcus aureus</i>	ATCC 6538P
Absorption Method	CFU	LOG
The test inoculum (CFU/mL)	1.8X10 <sup>5</sup>	5.3
Control specimen at 0h (C <sub>0</sub> )	3.7x10 <sup>4</sup>	4.6
Control specimen after 18h (C <sub>t</sub> )	3.3X10 <sup>7</sup>	7.5
Test specimen at 0h (T <sub>0</sub> )	4.0X10 <sup>4</sup>	4.6
Test specimen after 18h (T <sub>t</sub> )	<20	<1.3

Control specimen growth value (F) F = log C <sub>t</sub> – log C <sub>0</sub>	Test specimen growth value (G) G = log T <sub>t</sub> – log T <sub>0</sub>	Antibacterial activity value (A) A = (log C <sub>t</sub> – log C <sub>0</sub> ) – (log T <sub>t</sub> – log T <sub>0</sub> ) *In the case of log C <sub>0</sub> > log T <sub>0</sub> , substitute log C <sub>0</sub> for log T <sub>0</sub>
2.9	-3.3	>6.2

Test Organism:	<i>Escherichia coli</i>	ATCC 8739
Absorption Method	CFU	LOG
The test inoculum (CFU/mL)	1.8X10 <sup>5</sup>	5.3
Control specimen at 0h (C <sub>0</sub> )	3.6x10 <sup>4</sup>	4.6
Control specimen after 18h (C <sub>t</sub> )	2.4X10 <sup>6</sup>	6.4
Test specimen at 0h (T <sub>0</sub> )	3.4X10 <sup>4</sup>	4.5
Test specimen after 18h (T <sub>t</sub> )	<20	<1.3

Control specimen growth value (F) F = log C <sub>t</sub> – log C <sub>0</sub>	Test specimen growth value (G) G = log T <sub>t</sub> – log T <sub>0</sub>	Antibacterial activity value (A) A = (log C <sub>t</sub> – log C <sub>0</sub> ) – (log T <sub>t</sub> – log T <sub>0</sub> ) *In the case of log C <sub>0</sub> > log T <sub>0</sub> , substitute log C <sub>0</sub> for log T <sub>0</sub>
1.8	-3.2	>5.1

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**Note:**

1. The test report merely reflects the test results of the consigned matters of the client and is not a certification of the legitimacy of the related products.
2. The report is in vain if it is partly reproduced or used.
3. The test inoculum shall be at  $1.0 \times 10^5$  to  $3.0 \times 10^5$  CFU/mL
4. Control specimen growth value (F) shall be  $\geq 1.0$
5. Antibacterial activity value (A) shall be  $2.0 \leq A < 3.0$  for Effect antibacterial property.
6. Antibacterial activity value (A) shall be  $3.0 \leq A$  for Full effect antibacterial property.
7. This test report is used for the reference of making your own report and the hard copy is not required.
8. The test was conducted in SGS Food Laboratory-Kaohsiung.

– Picture(s) –



Photo A: Appearance of the sample

--- End of Report ---