



# ISHIZUKA GLASS Co., Ltd.

## Advanced Glass Company

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ISHIZUKA GLASS CO., LTD.  
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### REPORT ON ANTI-MICROBIAL TEST RESULT

**1. Product:**

FB-300 Kerrabio

No.	Sample
1.	FB-300 Kerrabio

**2. Outline of test:**

The test of FB-300 Kerrabio with silver ions was executed in according with:

JIS Z 2801:2010 "Antibacterial products – Test for antibacterial activity and efficacy"  
ISO 22196:2007 "Plastics – Measurement of antibacterial activity on plastic surfaces"

<Bacteria used for test>

*Escherichia coli* NBRC3972  
*Staphylococcus aureus* NBRC12732

**3. Test result:**

Table 1. Test result of Anti-microbial effect against *Escherichia coli*

Sample	Number of living bacteria			Antimicrobial activity value against Control	Reduction %
	At beginning (Per cm <sup>2</sup> )	After 24 hours (Per piece)	After 24 hours (Per cm <sup>2</sup> )		
1. FB-300 Kerrabio	$8.8 \times 10^3$	$<1 \times 10^2$	<6.3	>5.3	>99.999
Control (Film only)	$8.8 \times 10^3$	$2.1 \times 10^7$	$1.3 \times 10^6$		

Table 2. Test result of Anti-microbial effect against *Staphylococcus aureus*

Sample	Number of living bacteria			Antimicrobial activity value against Control	Reduction %
	At beginning (Per cm <sup>2</sup> )	After 24 hours (Per piece)	After 24 hours (Per cm <sup>2</sup> )		
1. FB-300 Kerrabio	$1.1 \times 10^4$	$<1 \times 10^2$	<6.3	>4.1	>99.993
Control (Film only)	$1.1 \times 10^4$	$1.5 \times 10^6$	$9.4 \times 10^4$		

**4. Consideration:**

FB-300 Kerrabio with silver ions showed antimicrobial efficacy against both *Escherichia coli* and *Staphylococcus aureus* as its activity value exceeded the standard value of 2.0, which means reduction percentage was more than 99.9%.

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