

The following merchandise was submitted and identified by the client as :

SGS File No. : AYAR20-01018
Product Name : Anti-Bacterial Film
Item No./Part No. : N/A
Test Period : 2020. 04. 01 to 2020. 04. 17
Test Result(s) : For further details, please refer to following page(s).



Conrad Lee

Technical Manager

Test Report

No. F690101/LF-CTSAYAR20-01018

Issued Date : 2020. 04. 17

Page 2 of 6

Sample No. : AYAR20-01018
Sample Description : Anti-Bacterial Film
Item / Part No. : N/A
Material : N/A

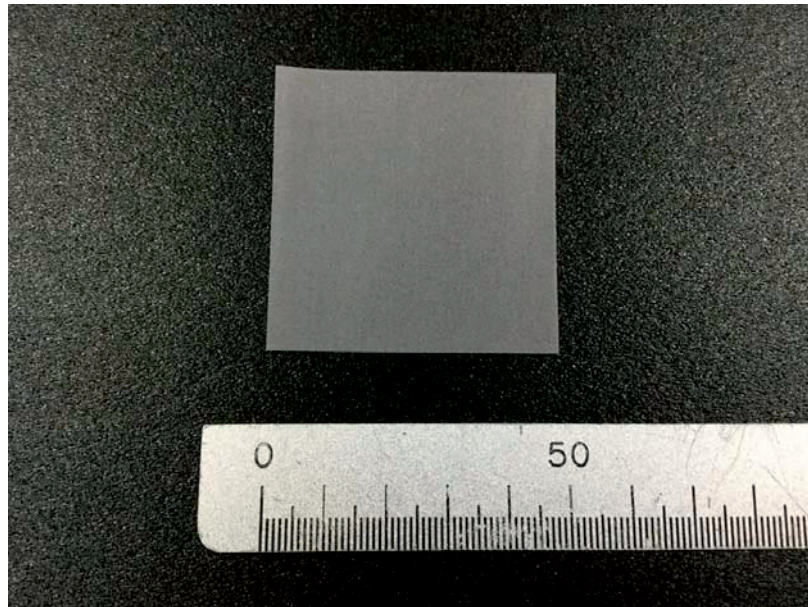
Antimicrobial Activity (JIS Z 2801:2010E)

Test microorganisms	Result(s)					
	Initial bacteria number (CFU/film)	Bacteria number after 24 hr at 35 °C		Antimicrobial activity		
		Control (CFU/film)	Sample (CFU/film)	R	Percentage (%)	
<i>Escherichia coli</i> ATCC 8739	2.2 x 10 ⁵	2.9 x 10 ⁸	1 st	<25	7.1	>99.9%
			2 nd	<25	7.1	>99.9%
			3 rd	<25	7.1	>99.9%
<i>Staphylococcus aureus</i> ATCC 6538P	1.8 x 10 ⁵	6.0 x 10 ⁷	1 st	<25	6.4	>99.9%
			2 nd	<25	6.4	>99.9%
			3 rd	<25	6.4	>99.9%
<i>Klebsiella pneumoniae</i> ATCC 4352	2.0 x 10 ⁵	7.9 x 10 ⁷	1 st	<25	6.5	>99.9%
			2 nd	<25	6.5	>99.9%
			3 rd	<25	6.5	>99.9%

<Remark>

- 1) Sample material: PVC
- 2) Inoculum Concentration:
 - Escherichia coli* :
 - Staphylococcus aureus* :
- 3) Method: JIS Z-2801 methods - Pour plate method
- 4) Dilution medium: 1/500 Nutrient broth (BD)
- 5) The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test report is not related to Korea Laboratory Accreditation and KS Q ISO/IEC 17025.
- 6) Verify for authenticity and validity in web site : https://twap.sgs.com/sgrsts_cloud.

Picture of Sample as Received :



AYAR20-01018

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- Antimicrobial Activity of Photo : Escherichia coli: Control & Sample -

- after 24 hr at 35 °C -

Control

Sample 1st



BACTERIUM: *Escherichia coli* ATCC 8739

SGS FILE NO. : Control

DATE: 2020-04-17 REF.: JIS Z 2801



BACTERIUM: *Escherichia coli* ATCC 8739

SGS FILE NO. : AYAR20-01018

DATE: 2020-04-17 REF.: JIS Z 2801



BACTERIUM: *Escherichia coli* ATCC 8739

SGS FILE NO. : AYAR20-01018

DATE: 2020-04-17 REF.: JIS Z 2801



BACTERIUM: *Escherichia coli* ATCC 8739

SGS FILE NO. : AYAR20-01018

DATE: 2020-04-17 REF.: JIS Z 2801

Sample 2nd

Sample 3rd

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- Antimicrobial Activity of Photo : Staphylococcus aureus: Control & Sample -

- after 24 hr at 35 °C -

Control

Sample 1st



BACTERIUM: *Staphylococcus aureus* ATCC 6538P

SGS FILE NO. : Control

DATE: 2020-04-17 REF.: JIS Z 2801



BACTERIUM: *Staphylococcus aureus* ATCC 6538P

SGS FILE NO. : AYAR20-01018

DATE: 2020-04-17 REF.: JIS Z 2801



BACTERIUM: *Staphylococcus aureus* ATCC 6538P

SGS FILE NO. : AYAR20-01018

DATE: 2020-04-17 REF.: JIS Z 2801



BACTERIUM: *Staphylococcus aureus* ATCC 6538P

SGS FILE NO. : AYAR20-01018

DATE: 2020-04-17 REF.: JIS Z 2801





Sample 2nd

Sample 3rd

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- Antimicrobial Activity of Photo : *Klebsiella pneumoniae*: Control & Sample -

- after 24 hr at 35 °C -

Control	Sample 1 st
	
<p>BACTERIUM: <i>Klebsiella pneumoniae</i> ATCC 4352</p> <p>SGS FILE NO. : Control</p> <p>DATE: 2020-04-17 REF.: JIS Z 2801</p>	<p>BACTERIUM: <i>Klebsiella pneumoniae</i> ATCC 4352</p> <p>SGS FILE NO. : AYAR20-01018</p> <p>DATE: 2020-04-17 REF.: JIS Z 2801</p>
	
<p>BACTERIUM: <i>Klebsiella pneumoniae</i> ATCC 4352</p> <p>SGS FILE NO. : AYAR20-01018</p> <p>DATE: 2020-04-17 REF.: JIS Z 2801</p>	<p>BACTERIUM: <i>Klebsiella pneumoniae</i> ATCC 4352</p> <p>SGS FILE NO. : AYAR20-01018</p> <p>DATE: 2020-04-17 REF.: JIS Z 2801</p>
Sample 2nd	Sample 3rd

*** End of Report ***

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