

**IDEA BRIDGE CO.,LTD**R/M B221, Business centre, 470 Yangcheon R/D, Gangseo-gu, Seoul,  
Korea

The following sample(s) was/were submitted and identified by/on behalf of the client as:-

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<b>SGS File No.</b>	: AYFN20-11734E
<b>Sample Description</b>	: ANTI-MICROBIAL MOBILE PROTECTION FILM
<b>Item no./Lot No.</b>	: -
<b>SGS Ref No.</b>	: AYHA20-03816
<b>Test Period</b>	: 2020. 04. 07 to 2020. 04. 17
<b>Purpose of Test Report</b>	: Data for reference
<b>Client Reference Data</b>	: HS4B, HS6B, HS9B, FX9B / HG3B, HG4B / TS4B, TS6B, TS9B, TG4B / TB200, TB130
<b>Test Results</b>	: For further details, please refer to following page (s)
<b>Report Comments</b>	: 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. Verify for authenticity and validity in web site : <a href="https://twap.sgs.com/sgsrsts_cloud">https://twap.sgs.com/sgsrsts_cloud</a>

  
ConradLee**Technical Manager / SGS KOREA**

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**Results:**

**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>Klebsiella pneumoniae</i> ATCC 4352	2.2 × 10 <sup>5</sup>	1.1 × 10 <sup>8</sup>	1st	<25	6.7	>99.9%
			2nd	<25	6.7	>99.9%
			3rd	<25	6.7	>99.9%
<i>Staphylococcus aureus</i> ATCC 6538P	1.6 × 10 <sup>5</sup>	3.8 × 10 <sup>7</sup>	1st	<25	6.2	>99.9%
			2nd	<25	6.2	>99.9%
			3rd	<25	6.2	>99.9%
<i>Salmonella typhimurium</i> NCTC12023	2.3 × 10 <sup>5</sup>	1.5 × 10 <sup>8</sup>	1st	<25	6.8	>99.9%
			2nd	<25	6.8	>99.9%
			3rd	<25	6.8	>99.9%

<Remark>

- 1) Sample material : HYBRID ANTI-SCRATCH FILM
- 2) Inoculum Concentration :  
*Klebsiella pneumoniae* : 2.2 × 10<sup>5</sup> CFU/film  
*Staphylococcus aureus* : 1.6 × 10<sup>5</sup> CFU/film  
*Salmonella typhimurium* : 2.3 × 10<sup>5</sup> CFU/film
- 3) Method: JIS Z-2801 methods- Pour plate method
- 4) Dilution Medium : 1/500 Nutrient broth (BD)

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## Picture of Sample as Received :






AYFN20-11734

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- Antimicrobial Activity of Photo: *Klebsiella pneumoniae* -





- after 24 hr at 35 ±1 °C

Control	Sample 1 <sup>st</sup>												
													
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- Antimicrobial Activity of Photo: *Staphylococcus aureus* -





- after 24 hr at 35 ±1 °C

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- Antimicrobial Activity of Photo: *Salmonella typhimurium*-

- after 24 hr at 35 ±1 °C

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\*\*\* End of Report \*\*\*

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