

## TEST REPORT: S08CHM05952-LYP\_CORR

Date: 06 NOV 2008

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### **SUBJECT**

Antimicrobial Activity of Coated Film

### **CLIENT**

TEC-HUB Pte Ltd  
Blk 2 Kaki Bukit Ave 1  
Kampong Ubi Industrial Estate  
#06-01  
Singapore 417938

Attn : Mr C H Tng

### **SAMPLE SUBMISSION DATE / TEST DATE**

13 Oct 2008 / 29 Oct 2008

### **DESCRIPTION OF SAMPLE**

3 samples of coated film, each of dimensions 150 mm x 150 mm, were labelled as follows:

- (1) AGG 18\_0
- (2) AGG 18\_2
- (3) AGG 25\_0

### **METHOD OF TEST**

JIS Z 2801 : 2000

"Antimicrobial products – Test for antimicrobial activity and efficacy".

The test microorganisms used were :

*Staphylococcus aureus* (ATCC 6538P)  
*Escherichia coli* (ATCC 8739)  
*Escherichia coli* (NCTC12900)

The coated films were cut into square of 50 mm x 50 mm for the test



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**RESULTS**

Test microorganism (Bacterial cells per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antimicrobial Activity (Criteria : Not less than 2.0)
	0 hour	24 hour	
<b><i>Staphylococcus aureus</i></b> <b>(ATCC 6538P)</b> <b>(1.5 x 10<sup>5</sup> cells)</b>			
Uncoated film (Control)	87 000	1 800 000	-
Coated film (AGG 18_0)	-	Less than 10	More than 5.3
Coated film (AGG 18_2)	-	Less than 10	More than 5.3
Coated film (AGG 25_0)	-	Less than 10	More than 5.3

Test microorganism (Bacterial cells per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antimicrobial Activity (Criteria : Not less than 2.0)
	0 hour	24 hour	
<b><i>Escherichia coli</i></b> <b>(ATCC 8739)</b> <b>(1.8 x 10<sup>5</sup> cells)</b>			
Uncoated film (Control)	64 000	110 000	-
Coated film (AGG 18_0)	-	Less than 10	More than 4.0
Coated film (AGG 18_2)	-	Less than 10	More than 4.0
Coated film (AGG 25_0)	-	Less than 10	More than 4.0

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**RESULTS** (Cont'd)

Test microorganism (Bacterial cells per test piece)	Average of the number of viable cells of test microorganism per test piece		Value of Antimicrobial Activity (Criteria : Not less than 2.0)
	0 hour	24 hour	
<b><i>Escherichia coli</i></b> <b>(NCTC12900)</b> <b>(0.7 x 10<sup>5</sup> cells)</b>			
Uncoated film (Control)	54 000	20 000 000	-
Coated film (AGG 18_0)	-	Less than 10	More than 6.3
Coated film (AGG 18_2)	-	Less than 10	More than 6.3
Coated film (AGG 25_0)	-	Less than 10	More than 6.3

**Note:**

The value of Antimicrobial Activity was calculated as log<sub>10</sub> of average of the number of viable bacterial cells on the uncoated films (Control) after 24 hours minus the log<sub>10</sub> of average of the number of viable bacterial cells on the antimicrobial coated films after 24 hours.

**MS AW HWEE YING**  
TECHNICAL EXECUTIVE

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MICROBIOLOGIST  
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January 2008