

TEST REPORT: 7191081562-CHM14-LYP

Date: 17 APR 2014

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Client's Ref: -

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SUBJECT

Antimicrobial Activity Evaluation

CLIENT

Greenlam Asia Pacific Pte Ltd
11 Sungei Kadut Crescent
Singapore 728683

Attn : Ms. Lin Huiping

SAMPLE SUBMISSION DATE / TEST DATE

27 Jan 2014 / 06 Feb 2014

DESCRIPTION OF SAMPLE

One sample of panels coated with "Greenlam High Pressure Laminates" (50mm x 20mm per piece) was submitted.

METHOD OF TEST

JIS Z 2801 : 2010

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

The test microorganisms used were :

Candida albicans (ATCC 10231)

Bacillus subtilis (ATCC 6633)

Pseudomonas aeruginosa (ATCC 15442)



TÜV SÜD PSB

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RESULTS

Test microorganism (Bacterial cells inoculated 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 hours	
<i>Pseudomonas aeruginosa</i> (ATCC 15442)			
Blank Polycarbonate Panel (Blank)	220 000	18 000 000	-
Uncoated panels	-	Less than 10	More than 6.26
Greenlam High Pressure Laminates	-	Less than 10	More than 6.26

Test microorganism (Bacterial cells inoculated 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 hours	
<i>Bacillus subtilis</i> (ATCC 6633)			
Blank Polycarbonate Panel (Blank)	140 000	6 700 000	-
Uncoated panels	-	Less than 10	More than 5.83
Greenlam High Pressure Laminates	-	Less than 10	More than 5.83

Test microorganism (Bacterial cells inoculated 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 hours	
<i>Candida albicans</i> (ATCC 10231)			
Blank Polycarbonate Panel (Blank)	75 000	340 000	-
Uncoated panels	-	Less than 10	More than 4.53
Greenlam High Pressure Laminates	-	Less than 10	More than 4.53

Note :

The value of Antimicrobial Activity was calculated as \log_{10} of average of the number of viable bacterial cells on the Control Blank after 24 hours minus the \log_{10} of average of the number of viable bacterial cells on the Sample after 24 hours.

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Remarks :

The above test results related to the samples as received.

Handwritten signature of MS AW HWEE YING in black ink.

MS AW HWEE YING
TECHNICAL EXECUTIVE

Handwritten signature of MRS KAM-LEONG YIN PHENG in black ink.

MRS KAM-LEONG YIN PHENG
PRODUCT MANAGER
MICROBIOLOGY
CHEMICAL & MATERIALS



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July 2011

