



SIRIM Berhad
Industrial Biotechnology Research Centre, Building 19

Tel: 03-55446953/6960

Fax: 03-55446988

TEST REPORT

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Applicant : Wong Weng Heng

Company : Titanium World Technology Sdn. Bhd.
No. 16-3, Jalan Jalil Jaya 6, Block 5,
Jalil Link, Bukit Jalil,
57000 Kuala Lumpur, MALAYSIA.

Sample : Chemical Disinfectant

Reference standard / Method of Test : Chemical disinfectants and antiseptics. Quantitative suspension test for the evaluation of basic bactericidal activity of chemical disinfectants and antiseptics. Test method and requirements (phase 1). BS EN 1040:2005

Description of Sample : Received three (3) samples:

1. Sample name: **SmartCoat+**
Marking: **Pure source**
Appearance: **Semi-translucent liquid**
2. Sample name: **SmartCoat**
Marking: **SC**
Appearance: **Semi-translucent liquid**
3. Sample name: **Armor8**
Marking: **A8**
Appearance: **Translucent liquid**

Date Received : 25 July 2018


Date Test Started : 25 July 2018

Job No. : J 414/18

Issue Date : 6 August 2018

Approved signatories


(MOHD KHAIRUL AZWAN AHMAD)
MJMM A0481
Analyst,
Industrial Biotechnology Research Centre,
SIRIM Berhad.


(MOHD MAHAYUDDIN HUSSIN)
MJMM A0482
Analyst,
Industrial Biotechnology Research Centre,
SIRIM Berhad.

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Experimental conditions:

1. Test method: Dilution-Neutralization Method
2. Neutralizer: Dey-Engley Neutralizing Broth
3. Concentration of product tested: 80 % of sample
4. Test conditions:
 - 4.1. Test microorganisms:
 - 4.1.1. *Staphylococcus aureus* ATCC 6538 (Bacteria)
 - 4.1.2. *Escherichia coli* ATCC 8739 (Bacteria)
 - 4.2. Test temperature: 20 °C
 - 4.3. Contact time: 5 minutes
 - 4.4. Incubation temperature: 37 °C
5. All controls and validation were within the basic limits.

Results:

Bactericidal activity of the following samples:

Test microorganisms	Log N_0	Sample	Log N_a	Log R
<i>Staphylococcus aureus</i> ATCC 6538	7.36	SmartCoat+	< 2.15	5.21
		SmartCoat	< 2.15	5.21
		Armor8	> 3.52	3.84
<i>Escherichia coli</i> ATCC 8739	7.27	SmartCoat+	< 2.15	5.12
		SmartCoat	< 2.15	5.12
		Armor8	< 2.15	5.12

Notes:

N_0 - Number of cells per ml in the test sample at the beginning of the contact time (time = 0 minute)

N_a - Number of cells per ml in the test sample at the end of the contact time (time = 5 minutes at 20 °C)

R (Bactericidal activity) - Reduction (where $\text{Log R} = \text{Log } N_0 - \text{Log } N_a$)

Interpretation of result:

The product shall be deemed to have passed the EN 1040 standard for bactericidal activity if it demonstrates in a valid test at least a 5 log reduction.


MOHD KHAIRUL AZWAN AHMAD
Researcher
Bioprocess Programme
Industrial Biotechnology Research Centre
SIRIM Berhad