

## TEST REPORT: 7191235726-CHM20-01-RC

Date: 14 APR 2020

Tel: +65 68851345 Fax: +65 67732912

Client's Ref: 4700066093

Email: Randy.CHIN@tuv-sud-psb.sg

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### **SUBJECT**

Antibacterial Activity Evaluation

### **CLIENT**

Institute of Materials Research and Engineering  
A\*STAR Research Entities  
20 Biopolis Way  
#08-01 Centros  
Singapore 138668

Attn : Xue Kun

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

18 Mar 2020 / 25 Mar 2020

### **DESCRIPTION OF SAMPLE**

One sample labelled as follows was submitted.

Product: LCX Labs Hand Sanitiser

### **METHOD OF TEST**

BS EN 1040 : 2005

“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)”.

The test microorganisms used were :

*Pseudomonas aeruginosa* (ATCC 15442)  
*Staphylococcus aureus* (ATCC 6538)

Dilution tested : Neat  
Contact time : 5 minutes  
Neutralization method: DE Broth Neutralization  
Test temperature: 20±1°C  
Incubation temperature: 36±1°C



TÜV SÜD PSB

Laboratory:  
TÜV SÜD PSB Pte. Ltd.  
No.1 Science Park Drive  
Singapore 118221

Phone : +65-6885 1333  
Fax : +65-6776 8670  
E-mail: enquiries@tuv-sud-psb.sg  
www.tuv-sud-psb.sg  
Co. Reg : 199002667R

Regional Head Office:  
TÜV SÜD Asia Pacific Pte. Ltd.  
1 Science Park Drive, #02-01  
Singapore 118221  
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**RESULTS**

Product : LCX Labs Hand Sanitiser

Validation and controls

Controls	Validation Suspension (Nv <sub>0</sub> )	30<Nv <sub>0</sub> <160 (Pass / Fail)	Experimental Condition control (A)	Neutralizer control (B)	Method Validation (C) Product Concentration: Neat	B and C ≥ 0.5 x Nv <sub>0</sub> (Pass / Fail)
<i>Pseudomonas aeruginosa</i> (ATCC 15442)	33	Pass	N.A.	34	76	Pass

Test Microorganism : *Pseudomonas aeruginosa* (ATCC 15442)

Contact Time / Concentration	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log <sub>10</sub>	CFU per ml	Log <sub>10</sub>		
<b>5 minutes</b> Neat	19 000 000	7.28	Less than 10	Less than 1	More than 6.38	More than 99.99994

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**RESULTS** (cont'd)

Product : LCX Labs Hand Sanitiser

Validation and controls

Controls	Validation Suspension (Nv <sub>0</sub> )	30<Nv <sub>0</sub> <160 (Pass / Fail)	Experimental Condition control (A)	Neutralizer control (B)	Method Validation (C) Product Concentration: Neat	B and C ≥0.5 x Nv <sub>0</sub> (Pass / Fail)
<i>Staphylococcus aureus</i> (ATCC 6538)	44	Pass	N.A.	57	46	Pass

Test Microorganism : *Staphylococcus aureus* (ATCC 6538)

Contact Time / Concentration	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of Test Microorganism
	CFU per ml	Log <sub>10</sub>	CFU per ml	Log <sub>10</sub>		
<b>5 minutes</b> Neat	20 000 000	7.30	Less than 10	Less than 1	More than 6.30	More than 99.99995

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## Remarks :

The product shall be deemed to have passed the test if it demonstrates a **5 Log reduction or more** (at least >99.999% kill) in viability within 5 minutes or less under the conditions defined by this test when the test organisms are *Pseudomonas aeruginosa* and *Staphylococcus aureus*.

This test method evaluates the basic bactericidal activity of chemical disinfectants with no specific application. It does not evaluate the activity of a product for an intended use. More specific test methods are used for further assessment of the efficacy of chemical disinfectants and antiseptics for a defined purpose.

The above test results relate to the sample as received.

Handwritten signature of MS CHUA XINNI in black ink.

**MS CHUA XINNI**  
HIGHER TECHNICAL EXECUTIVE

Handwritten signature of MS TI HUI EN in black ink.

**MS TI HUI EN**  
MICROBIOLOGIST  
MICROBIOLOGY  
CHEMICAL & MATERIALS



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July 2011

