Date: 06 APR 2020 Tel: +65 68851345 Fax: +65 67732912

Client's Ref: Email: Randy.CHIN@tuv-sud-psb.sg

Note: This report is issued subject to the Testing and Certification Regulations of the TÜV SÜD Group and the General Terms and Conditions of Business of TÜV SÜD PSB Pte Ltd. In addition, this report is governed by the terms set out within this report.



PSB Singapore

Add value. Inspire trust.

SUBJECT

Antibacterial Activity Evaluation

CLIENT

Nila Singapore Pte Ltd 24 Sin Ming Lane #05-103 Midview City Singapore 573970

Attn: Janet Tan

SAMPLE SUBMISSION DATE/ TEST DATE

18 Mar 2020 / 25 Mar 2020

DESCRIPTION OF SAMPLE

One sample labelled as follows was submitted.

Product: Shield 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



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 TÜV [®]

06 APR 2020



RESULTS

Product : Shield Hand Sanitiser

Validation and controls

Validation and controls							
Controls	Validation Suspension (Nv₀)	30 <nv<sub>0<160 (Pass / Fail)</nv<sub>	Experimental Condition control (A)	Neutralizer control (B)	Method Validation (C) Product Concentration: Neat	B and C ≥ 0.5 x Nv ₀ (Pass / Fail)	
Pseudomonas aeruginosa (ATCC 15442)	33	Pass	N.A.	34	65	Pass	

Test Microorganism : Pseudomonas aeruginosa (ATCC 15442)

Contact Time /	Initial Count of Test Microorganism per ml of Test Mixture		Count of Surviving Test Microorganism per ml		Log Reduction	Percentage Kill of
Concentration	CFU per ml	Log ₁₀	CFU per ml	Log ₁₀	•	Test Microorganism
5 minutes						
Neat	19 000 000	7.28	Less than 10	Less than 1	More than 6.28	More than 99.99994

06 APR 2020



RESULTS (cont'd)

Product : Shield Hand Sanitiser

Validation and controls

Validation and controls								
Controls	Validation Suspension (Nv₀)	30 <nv<sub>0<160 (Pass / Fail)</nv<sub>	Experimental Condition control (A)	Neutralizer control (B)	Method Validation (C) Product Concentration: Neat	B and C ≥0.5 x Nv ₀ (Pass / Fail)		
Staphylococcus aureus (ATCC 6538)	44	Pass	N.A.	57	48	Pass		

Test Microorganism : Staphylococcus aureus (ATCC 6538)

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

06 APR 2020



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.



06 APR 2020



Please note that this Report is issued under the following terms:

July 2011

- 1. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that TÜV SÜD PSB approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that TÜV SÜD PSB in any way "guarantees" the later performance of the product/equipment. Unless otherwise stated in this report, no tests were conducted to determine long term effects of using the specific product/equipment.
- 2. The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client. TÜV SÜD PSB therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture, consignment or any information supplied.
- 3. Nothing in this report shall be interpreted to mean that TÜV SÜD PSB has verified or ascertained any endorsement or marks from any other testing authority or bodies that may be found on that sample.
- 4. This report shall not be reproduced wholly or in parts and no reference shall be made by the Client to TÜV SÜD PSB or to the report or results furnished by TÜV SÜD PSB in any advertisements or sales promotion.
- 5. Unless otherwise stated, the tests were carried out in TÜV SÜD PSB Pte Ltd, No.1 Science Park Drive Singapore 118221.

