

TEST REPORT: 7191220534-CHM19-01-RC

Date: 21 OCT 2019

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Client's Ref:

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SUBJECT

Antimicrobial Activity Evaluation

CLIENT

Sparks Cleantech Pte Ltd
1 Raffles Place, #29-01 One Raffles Place
Singapore 048616

SAMPLE SUBMISSION DATE/ TEST DATE

24 Sep 2019 / 15 Oct 2019

DESCRIPTION OF SAMPLE

One sample of "SPARKS DISINFECTANT" was submitted.

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: Membrane Filtration
Test temperature: 20±1°C
Incubation temperature: 36±1°C



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RESULTS

Product : SPARKS DISINFECTANT

Validation and controls

Controls	Validation Suspension (Nv ₀)	30<Nv ₀ <160 (Pass / Fail)	Experimental Condition control (A)	Neutralizer control (B)	Method Validation (C) Product Concentration: Neat	B and C ≥0.5 x Nv ₀ (Pass / Fail)
<i>Pseudomonas aeruginosa</i> (ATCC 15442)	56	Pass	N.A.	47	43	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 ₁₀	CFU per ml	Log ₁₀		
5 minutes Neat	24 000 000	7.38	Less than 10	Less than 1	More than 6.38	More than 99.99996

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RESULTS (Cont)

Product : SPARKS DISINFECTANT

Validation and controls

Controls	Validation Suspension (Nv ₀)	30<Nv ₀ <160 (Pass / Fail)	Experimental Condition control (A)	Neutralizer control (B)	Method Validation (C) Product Concentration: Neat	B and C ≥0.5 x Nv ₀ (Pass / Fail)
<i>Staphylococcus aureus</i> (ATCC 6538)	32	Pass	N.A.	32	21	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 ₁₀	CFU per ml	Log ₁₀		
5 minutes Neat	15 000 000	7.18	Less than 10	Less than 1	More than 6.18	More than 99.99993

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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 *Staphylococcus aureus* and *Pseudomonas aeruginosa*.

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.

A handwritten signature in blue ink, appearing to be 'CX'.

MS CHUA XINNI
HIGHER TECHNICAL EXECUTIVE

A handwritten signature in blue ink, appearing to be 'WY'.

MS CHEW WAN YU
EXECUTIVE MICROBIOLOGIST
MICROBIOLOGY
CHEMICAL & MATERIALS



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July 2011

