TEST REPORT: 7191235080-CHM20-04-RC

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SUBJECT

Antifungal 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 / 26 Mar 2020

DESCRIPTION OF SAMPLE

One sample labelled as follows was submitted.

Product: Shield Disinfecting Spray

METHOD OF TEST

BS EN 1275 : 2005

"Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of basic fungicidal or basic yeasticidal activity of chemical disinfectants and antiseptics – Test method and requirements (Phase 1)".

The test microorganisms used were :

Candida albicans (ATCC 10231)
Aspergillus niger (ATCC 16404)

Dilution tested : Neat
Contact time : 15 minutes
Neutralization method: D/E Neutralization broth
Test temperature: 20±1°C
Incubation temperature: 30±1°C

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RESULTS

Product : Shield Disinfecting Spray

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)
Candida albicans (ATCC 10231)	65	Pass	N.A.	59	58	Pass

Test Microorganism : *Candida albicans* (ATCC 10231)

Concentration / Contact Time	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}		
15 minutes						
Neat	3 000 000	6.48	Less than 10	Less than 1	More than 5.48	More than 99.9996

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RESULTS (*cont'd*)

Product : Shield Disinfecting Spray

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)
Aspergillus niger (ATCC 16404)	66	Pass	N.A.	35	34	Pass

Test Microorganism : *Aspergillus niger* (ATCC 16404)

Concentration / Contact Time	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}		
15 minutes						
Neat	1 900 000	6.28	95	1.98	4.30	99.995

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Remarks :

The product shall be deemed to have passed the test for fungicidal activity if it demonstrates a 4 Log reduction or more (at least >99.99%) in viability within 15 minutes under the conditions defined by this test using mould as test organisms.

The product shall be deemed to have passed the test for yeasticidal activity if it demonstrates a 4 Log reduction or more (at least >99.99%) in viability within 15 minutes under the conditions defined by this test using yeasts as test organisms.

This test method evaluates the basic fungicidal and yeasticidal 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.

MS CHUA XINNI
HIGHER TECHNICAL EXECUTIVE

MS TI HUI EN
MICROBIOLOGIST
MICROBIOLOGY
CHEMICAL & MATERIALS

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July 2011