



M & L LABS

Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Ref. No : 11088381

Issued at : Johannesburg

Date : 02/06/2020

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COMPANY NAME : HEALTH AND HYGIENE PTY LTD
ADDRESS : CNR LEADER & HOEF SMID ROAD, STORMILL EXT 10, ROODEPOORT
SUBJECT : QUANTITATIVE SUSPENSION TEST FOR THE EVALUATION OF
FUNGICIDAL ACTIVITY OF CHEMICAL DISINFECTANTS
AND ANTISEPTICS SANS 51650 (EN1650): DILUTION-NEUTRALIZATION
METHOD
MARKED : F10 SUPER CONCENTRATE DISINFECTANT BATCH 220441
ACTIVE INGREDIENT : QUATERNARY AMMONIUM AND BIGUANIDINE COMPOUNDS 5.8%
APPEARANCE : CLEAR LIQUID
STORAGE CONDITIONS : STORE BELOW 30°C IN DRY CONDITIONS
NEUTRALIZING AGENT : NEUTRALIZING FLUID
INSTRUCTED BY : XOLANI
LAB NO. : P231126
RECEIVED ON : 21/05/2020
DATE ANALYSED : 25/05/2020

EXPERIMENTAL CONDITIONS:

Obligatory conditions
test organisms:

Candida albicans ATCC 10231

Aspergillus brasiliensis ATCC 16404

Test temperature:

20°C

Contact time:

15 minutes

Interfering substance:

0.3g/l Bovine serum albumin (Clean conditions)

Test incubation temperature:

30°C

PASS REQUIREMENTS:

The product shall demonstrate at least a 4 decimal log reduction when diluted with hard water/or undiluted and tested under obligatory test conditions. At least one of the test concentrations will demonstrate a log reduction of less than 4 log.

TECHNICAL SIGNATURE
T. N. K. RAZA

Authorised Signature (original blue ink)



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TEST VALIDITY

For each test organism:

- N is between 1.5×10^7 and 5.0×10^7 ($7.17 \leq \log N \leq 7.70$)
- N_0 is between 1.5×10^6 and 5.0×10^6 ($6.17 \leq \log N_0 \leq 6.70$)
- N_{v0} is between 30 and 160 (3.0×10^1 and 1.6×10^2)
- A, B, C are equal to or greater than $0.5 \times N_{v0}$
- Control of weighted mean counts: quotient is not lower than 5 and not higher than 15

RESULTS:

Candida albicans ATCC 10231

Table 13: N and N_0 values

Dilution	Vc1	Vc2	Average N(wm)	Log N	N ₀ (N/10)	Log N ₀
10 ⁻⁵	318	322	3.2 x10 ⁷	7.50	3.2 x10 ⁶	6.50
10 ⁻⁶	34	32				
Is Log N between 7.17 and 7.70: Yes						
Is Log N ₀ between 6.17 and 6.70: Yes						
Control of weighted mean counts: 9.70						

Table 14: Test Log Reduction Values

Product Concentration	Vc1	Vc2	Na (Ave $Vc1 \& Vc2 \times 10$)	Log Na	Log Reduction (No: 6.50)
0.01%	>330	>330	>3300	>3.52	<2.98
0.4%	<14	<14	<140	<2.15	>4.35
0.8%	<14	<14	<140	<2.15	>4.35

Aspergillus brasiliensis ATCC 16504

Table 15: N and N_0 values

Dilution	Vc1	Vc2	Average N(wm)	Log N	N ₀ (N/10)	Log N ₀
10 ⁻⁶	344	335	4.4 x10 ⁷	7.64	4.4 x10 ⁶	6.64
10 ⁻⁷	56	52				
Is Log N between 7.17 and 7.70: Yes						
Is Log N ₀ between 6.17 and 6.70: Yes						
Control of weighted mean counts: 6.29						

TECHNICAL SIGNATORY
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AA

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Table 16: Test Log Reduction Values

Product Concentration	Vc1	Vc2	Na (Ave Vc1&Vc2x10)	Log Na	Log Reduction (No: 6.64)
0.01%	>165	>165	>1650	>3.22	<3.42
0.4%	<14	<14	<140	<2.15	>4.49
0.8%	<14	<14	<140	<2.15	>4.49

VALIDATIONS AND CONTROLS

Table 17: *Candida albicans* ATCC 10231

Table 17: <i>Candida albicans</i> ATCC 10231											
Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	43	40	Vc1	49	53.5	Vc1	56	53	Vc1	52	57
Vc2	37		Vc2	58		Vc2	50		Vc2	62	
0.5x 40 (Nvo)= 20											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A≥0.5xNvo value: YES											
Is the Neutralizer Condition B≥0.5xNvo value: YES											
Is the Method Validation C≥0.5xNvo value: YES											

Table 18: *Aspergillus brasiliensis* ATCC 16404

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	40	43.5	Vc1	36	44	Vc1	55	53.5	Vc1	33	36
Vc2	47		Vc2	52		Vc2	52		Vc2	39	
0.5x 43.5 (Nvo)= 21.8											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A $\geq$ 0.5xNvo value: YES											
Is the Neutralizer Condition B $\geq$ 0.5xNvo value: YES											
Is the Method Validation C $\geq$ 0.5xNvo value: YES											

Conclusion

The product tested at 0.4%v/v complied with the criteria indicated under the "Pass Requirements" of SANS 51650 (EN 1650) standard (obligatory conditions) which requires at least a 99.99% kill (4 log reduction)

TECHNICAL SIGNATORY
 T. N. HAZA

Authorized Signature (original blue ink)