

Company: X-Mist Limited

102 Tettenhall Road,

Wolverhampton,

WV6 0BW

Contact name: David Muirhead

Contact email:

Purchase order number: 12856-A

Date of report: 03/05/2020

Melbec reference number: 16495 No. of samples: 1

Name of Test Product: X-MIST ULTIMATE ALL-ROUND SANITIZER

Batch number: #1

Sample Details:



Manufacturer / Supplier:

Product storage conditions:

Appearance of the product (as supplied):

Appearance of the product (after dilution):

Appearance of the product with interfering substance and test organism:

X-Mist Limited
Ambient
Clear Liquid
Clear Liquid
Slightly Grey

Active substance and concentration:

Product dilutions/concentrations:

Diluent used to dilute product:

NA

The test product was in a satisfactory condition for testing when received.

Date product received: 23/04/2020 Date product tested: 28/04/2020

Experimental Conditions:

Interfering substance: Bovine Albumin (dirty 3.0g/l)

Test temperature: 20°C Contact time: 5 min

Test organisms: Candida albicans ATCC 10231, Aspergillus brasiliensis ATCC 16404

Incubation temperature: $30^{\circ}C \pm 1^{\circ}C$

Deviations from the standard:

Obligatory / specific purposes: Client only requested testing on the product as a single concentration.

Requirements of the Standard:

The test product shall demonstrate at least a 4 decimal logarithm (lg) reduction when tested in accordance with this standard under simulated clean or dirty conditions.



Conclusion:

The product X-MIST ULTIMATE ALL-ROUND SANITIZER (Batch Code: #1) did not meet the log reduction requirements as specified in EN 1650 (4 lg within the relevant contact time) for the *Aspergillus brasiliensis* and hence a fungicidal claim cannot be made.

The product X-MIST ULTIMATE ALL-ROUND SANITIZER (Batch Code: #1) met the log reduction requirements as specified in EN 1650 (4 lg within the relevant contact time) for the *Candida albicans* and hence a yeasticidal claim can be made.

Testing carried out by:

Danika Weatherburn Lab Manager Report authorised by:

Dawn Mellors Technical Director

Test Results:

Membrane Filtration: Rinsing Liquid: NZ



Candida albicans:

Validation and Controls:

Validation Suspension (Nv₀)		Experimental Conditions Control (A)		Neutraliser or Filtration Control (B)		Method Validation (Product Conc RTU) (C)					
Vc1	63	Mean 6.0 x	Vc1	61	<u>Mean</u> 6.5 x	Vc1	66	<u>Mean</u> 7.1 x	Vc1	59	<u>Mean</u> 5.45
Vc2	57	101	Vc2	69	10¹	Vc2	76	10¹	Vc2	70	x 10¹
Is the mean of Nv ₀ between 30 and 160:		Is the mean of A \geq 0.5 x the mean of Nv ₀		Is the mean of B \geq 0.5 x the mean of Nv ₀		Is the mean of C ≥ 0.5 x the mean of Nv ₀					
Yes:X	No):	Yes:X		No:	Yes:	X	No:	Yes:	X	No:

Test Suspension: (N & N₀):

N:

Dilution:	Vc1	Vc2	Mean		
			cfu	lgN	
1) 10 ⁻⁵	>330	>330	4.3 x 10 ⁷	7.63	
2) 10 ⁻⁶	46	40			

N₀:

$N_0 (N/10) =$	4.3 x 10 ⁶	$lg N_0 =$	6.63
Is lg N₀ between 6.17 inoculum)	and 6.70 (required	Yes:X	No:
inoculum)			

Test (Na and IgR):

% Final Conc	Vc1	Vc2	Na	lgNa	lgR
of Product			(mean of Vc1		(lgN₀-lgNa)
Tested:			& Vc2 x10)		
1: RTU	<14	<14	$<1.4 \times 10^{2}$	<2.15	>4.48



Aspergillus brasiliensis:

Validation and Controls:

V	Validation Experimental		Neutraliser or			Method Validation					
Suspension		Conditions Control		Filtration Control			(Product Conc RTU)				
	(Nv_0)		(A)		(B)			(C)			
Vc1	134	<u>Mean</u>	Vc1	60	<u>Mean</u>	Vc1	68	<u>Mean</u>	Vc1	66	<u>Mean</u>
VCI		1.14	VCI		6.4 x	VCI		7.4 x	VCI		6.75
Vc2	93	x 10 ²	Vc2	68	101	Vc2	80	101	Vc2	69	x 10 ¹
Is the	Is the mean of Nv_0 Is the mean of $A \ge$		Is the mean of B ≥		Is the mean of C ≥						
between 30 and		0.5 x the mean of		0.5 x the mean of		an of	0.5 x the mean of		ean of		
160:		Nv ₀		Nv_0		Nv_0					
Yes:X	No	0:	Yes:X		No:	Yes:	X	No:	Yes:	X	No:

Test Suspension: (N & N₀):

N:

Dilution:	Vc1	Vc2	Me	1ean	
			cfu	lgN	
1) 10-5	>165	>165	4.55 x	7.66	
2) 10 ⁻⁶	48	43	10 ⁷		

N₀:

$N_0 (N/10) = 4.55 \times 10^6$	lg N₀ =	6.66	
Is lg N₀ between 6.17 and 6.70 (requir	red Yes:X	No:	
inoculum)			

Test (Na and IgR):

% Final Conc	Vc1	Vc2	Na	lgNa	lgR
of Product			(mean of Vc1	_	(lgN₀-lgNa)
Tested:			& Vc2 x10)		
1: RTU	>165-2	>165-2	>1.65 x 10 ⁴	>4.22	<2.60

The sample detailed in this report will be retained for 1 month after report date, unless otherwise requested. The results on this report refer to the items tested only. Sample description (name of product) and batch references (batch number) stated are as provided by the customer. This report shall not be reproduced in part or full without written permission from Melbec Microbiology Limited.

End of test report