

Company Name: X-Mist Limited

Contact Name: David Muirhead

Contact Email:

Purchase Order No: 12856-A

Report Date: 10/06/2020

**Melbec Ref Number:** 16494

**No. of Samples:** 1

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

**Batch Number:** #1

**Sample Details:**

Manufacture / Supplier:.....	X-Mist Limited
Product storage conditions:.....	Ambient
Appearance of the product (as supplied):.....	Clear colourless
Appearance of the product (after dilution):.....	N/A
Appearance of product with interfering substance and test organism:	Opaque
Active substance and concentration:.....	DDAC
Product dilutions/concentrations:.....	Ready to Use (RTU)
Diluent used to dilute product:.....	N/A
Incubation temperature: .....	36 degrees

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

Date product received:      23/04/20	Test Date:                      27/04/20
--------------------------------------	--

**Experimental Conditions:**

Interfering substance:	Bovine Albumin (dirty 3.0g/l)
Test temperature:	18 to 25 °C
Contact time:	5 Minutes
Test organisms:	Pseudomonas aeruginosa ATCC 15442
	Staphylococcus aureus ATCC 6538
	Escherichia coli ATCC 10536
	Enterococcus hirae ATCC 10541

**Requirements of the Standard:**

The test product shall demonstrate at least a 5 decimal logarithm (lg) reduction when tested in accordance with this standard under simulated clean or dirty conditions.

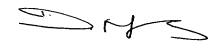
**Conclusion:**

For the product Surface Disinfectant - X-MIST ULTIMATE ALL-ROUND SANITIZER, [#1] the log reduction requirements as specified in EN 1276:2019 (5 lg within the relevant contact time) were met.

Testing carried out by:

Name: Danika Weatherburn  
Position: Lab Manager

Report authorised by:



Name: Dawn Mellors  
Position: Technical Director  
Date: 10/06/2020

**Test Results:**

**Neutralisation Method Used:**

Membrane filtration

Rinsing Liquid Used: N7

***Pseudomonas aeruginosa* ATCC  
15442**

Validation and controls									Melbec Ref No	16494	
Validation suspension ( $Nv_0$ )			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	64	$\bar{X} =$	Vc 1	42	$\bar{X} =$	Vc 1	76	$\bar{X} =$	Vc 1	36	$\bar{X} =$
Vc 2	62	63	Vc 2	29	35.5	Vc 2	64	70	Vc 2	45	40.5
$30 \leq \bar{X} \text{ of } Nv_0 \leq 160?$ <b>Yes</b>			$\bar{X} \text{ of A is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ <b>Yes</b>			$\bar{X} \text{ of B is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ <b>Yes</b>			$\bar{X} \text{ of C is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ <b>Yes</b>		

**Test suspension and test**

<b>Test suspension (N and <math>N_0</math>):</b>	<b>N</b>	Vc 1	Vc 2	$X_m$ 3.35E+08 ; $\lg N =$ 8.53
	$10^{-6}$	>330	>330	$N_0 = N/10$ ; $\lg N_0 =$ 7.53
	$10^{-7}$	38	29	$7.17 \leq \lg N_0 \leq 7.70?$ Yes $\bar{X} \text{ quotient} = >5 \text{ and } <15?$ N/A

Conc. of the active (%)	Vc 1	Vc 2	$Na = \bar{X} \times 10$	$\lg Na$	$\lg R$ $N_0 =$ 7.53	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15	>5.38	5 Minutes	<b>Pass</b>

**Staphylococcus aureus ATCC  
6538**

Validation and controls									Melbec Ref No	16494	
Validation suspension ( $N_{v_0}$ )			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	69	$\bar{X} =$	Vc 1	102	$\bar{X} =$	Vc 1	71	$\bar{X} =$	Vc 1	100	$\bar{X} =$
Vc 2	78	73.5	Vc 2	81	91.5	Vc 2	66	68.5	Vc 2	113	106.5
$30 \leq \bar{X} \text{ of } N_{v_0} \leq 160?$ <b>Yes</b>			$\bar{X} \text{ of A is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ <b>Yes</b>			$\bar{X} \text{ of B is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ <b>Yes</b>			$\bar{X} \text{ of C is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ <b>Yes</b>		

Test suspension and test	N	Vc 1	Vc 2	X m	3.00E+08	; lg N =	8.48
Test suspension (N and $N_0$ ):	$10^{-6}$	>330	>330	$N_0 = N/10$		; lg $N_0 =$	7.48
	$10^{-7}$	34	26	$7.17 \leq \lg N_0 \leq 7.70?$		Yes	
				$\bar{X} \text{ quotient} = >5 \text{ and } <15?$		N/A	

Conc. of the active (%)	Vc 1	Vc 2	$N_a = \bar{X} \times 10$	lg $N_a$	lgR $N_0 =$	7.48	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15		>5.33	5 Minutes	Pass

**Escherichia coli ATCC 10536**

Validation and controls									Melbec Ref No	16494	
Validation suspension ( $N_{v_0}$ )			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	100	$\bar{X} =$	Vc 1	103	$\bar{X} =$	Vc 1	94	$\bar{X} =$	Vc 1	57	$\bar{X} =$
Vc 2	85	92.5	Vc 2	95	99	Vc 2	81	87.5	Vc 2	45	51
$30 \leq \bar{X} \text{ of } N_{v_0} \leq 160?$ <b>Yes</b>			$\bar{X} \text{ of A is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ <b>Yes</b>			$\bar{X} \text{ of B is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ <b>Yes</b>			$\bar{X} \text{ of C is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ <b>Yes</b>		

**Test suspension and test**

<b>Test suspension (N and <math>N_0</math>):</b>	<b>N</b>	Vc 1	Vc 2	X m	4.60E+08 ; lg N =	8.66
	$10^{-6}$	>330	>330	$N_0 = N/10$ ; lg $N_0 =$	7.66	
	$10^{-7}$	47	45	$7.17 \leq \lg N_0 \leq 7.70?$	Yes	
				$\bar{X} \text{ quotient} = >5 \text{ and } <15?$		N/A

Conc. of the active (%)	Vc 1	Vc 2	$N_a = \bar{X} \times 10$	lg $N_a$	lgR $N_0 =$	7.66	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15		>5.52	5 Minutes	Pass

**Enterococcus hirae ATCC 10541**

Validation and controls									Melbec Ref No	16494	
Validation suspension ( $Nv_0$ )			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	65	$\bar{X} =$	Vc 1	57	$\bar{X} =$	Vc 1	61	$\bar{X} =$	Vc 1	50	$\bar{X} =$
Vc 2	62	63.5	Vc 2	50	53.5	Vc 2	61	61	Vc 2	59	54.5
$30 \leq \bar{X} \text{ of } Nv_0 \leq 160?$ <b>Yes</b>			$\bar{X} \text{ of A is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ <b>Yes</b>			$\bar{X} \text{ of B is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ <b>Yes</b>			$\bar{X} \text{ of C is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ <b>Yes</b>		

**Test suspension and test**

Test suspension ( $N$ and $N_0$ ):	$N$	Vc 1	Vc 2	$X_m$ 2.90E+08 ; $\lg N =$ 8.46
	$10^{-6}$	>330	>330	$N_0 = N/10$ ; $\lg N_0 =$ 7.46
	$10^{-7}$	31	27	$7.17 \leq \lg N_0 \leq 7.70?$ Yes $\bar{X} \text{ quotient} = >5 \text{ and } <15?$ N/A

Conc. of the active (%)	Vc 1	Vc 2	$Na = \bar{X} \times 10$	$\lg Na$	$\lg R$ $N_0 =$ 7.46	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15	>5.32	5 Minutes	Pass