

Company Name: Greenex DA
Contact Name: Shahid Javeed
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Purchase Order No: N/A

Report Date: 07/09/2020

Melbec Ref Number: 19856
No. of Samples: 1

Name of Test Product: Greenolyte 500
Batch Number: 170820-1

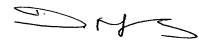
Conclusion:

The test product has met the requirements as specified in EN13697 for a bactericidal claim for Ready To Use (RTU) and 200ppm concentrations in clean conditions and a contact time of 5 minutes.

Testing carried out by:

Name: Vicci Wells
Position: Senior Microbiologist

Report authorised by:



Name: Dawn Mellors
Position: Technical Director
Date: 07/09/2020

Test Results:

Neutralisation Method Used:

Dilution neutralisation by pour plate

Neutraliser used N1

Viable Counts (Nc, Nd & Nts)

Nc is the mean log number of organisms per test surface of the water control at the end of the contact time

Nd is the mean log number of organisms per test surface of the disinfectant test at the end of the contact time

Nts is the mean number of organisms remaining on the test surface at the end of the test.

NC is the neutraliser control

NT is the method validation

Log Reduction:

Log reduction (R) = $\text{Log}N_c - \text{Log}N_d$

Bacterial or Fungal Test Suspension (N) (cfu/disc)

	<i>Pseudomonas aeruginosa</i> ATCC 15442			<i>Staphylococcus aureus</i> ATCC 6538			<i>Escherichia coli</i> ATCC 10536			<i>Enterococcus hirae</i> ATCC 10541		
Count	-7	231	224	-6	>330	>330	-6	>330	>330	-6	>330	>330
	-8	28	26	-7	41	35	-7	33	33	-7	34	30
Weighted Mean	2.31E+09			3.80E+08			3.30E+08			3.20E+08		
Lg	9.36			8.58			8.52			8.51		
6.57<N<7.10	-			6.98			6.92			6.90		
7.57<N<8.10	7.76			-			-			-		

Validation and Controls (Counts on Test Surfaces)

	<i>Pseudomonas aeruginosa</i> ATCC 15442						<i>Staphylococcus aureus</i> ATCC 6538					
	NT			NC			NT			NC		
Count	-2	>330	>330	-2	>330	>330	-3	>330	>330	-3	>330	>330
	-3	142	139	-3	145	143	-4	88	86	-4	111	90
Weighted Mean	1.41E+06			1.44E+06			8.70E+06			1.01E+07		
Lg	6.15			6.16			6.94			7.00		
NC - Nc (Not > +/- 0.3lg)	-			-0.07			-			0.02		
NT - Nc (Not > +/- 0.3lg)	-0.08			-			-0.04			-		

	<i>Escherichia coli</i> ATCC 10536						<i>Enterococcus hirae</i> ATCC 10541					
	NT			NC			NT			NC		
Count	-3	>330	>330	-3	>330	>330	-3	>330	>330	-3	>330	>330
	-4	28	27	-4	36	36	-4	57	51	-4	46	42
Weighted Mean	2.75E+06			3.60E+06			5.40E+06			4.40E+06		
Lg	6.44			6.56			6.73			6.64		
NC - Nc (Not > +/- 0.3lg)	-			0.28			-			-0.23		
NT - Nc (Not > +/- 0.3lg)	0.17			-			-0.15			-		

Determination of Microbicidal Activity (Nd) and Water Control (Nc) (Count/Test Surface)

Pseudomonas aeruginosa ATCC 15442

10 ^x	Water Control (Nc)		Test Procedure (Nd)		Test Procedure (Nd)		Test Procedure (Nd)	
			RTU (500PPM)		200PPM		50PPM	
N	-		0	0	0	-2	94	100
-1	-		0	0	0	-3	0	0
-2	>330	>330	-	-	-	-	-	-
-3	175	164	-	-	-	-	-	-
Mean	1.70E+06		-	-	-	-	-	-
Lg	6.23		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nts (count remaining on disc)	94		0	0	>100	>100	>100	>100
Log Reduction (R)			>6.13	>6.13	>6.13	>6.13	>6.13	>6.13

Staphylococcus aureus ATCC 6538

10 ^x	Water Control (Nc)		Test Procedure (Nd)		Test Procedure (Nd)		Test Procedure (Nd)	
			RTU (500PPM)		200PPM		50PPM	
N	-		0	0	0	0	-	-
-1	-		0	0	0	0	>330	>330
-2	-		-	-	-	-	111	98
-3	>330	>330	-	-	-	-	-	-
-4	95	95	-	-	-	-	-	-
Mean	9.50E+06		-	-	-	-	1.05E+05	1.05E+05
Lg	6.98		<0.10	<0.10	<0.10	<0.10	5.02	5.02
Nts (count remaining on disc)	>100		0	0	>100	>100	>100	>100
Log Reduction (R)			>6.88	>6.88	>6.88	>6.88	<1.96	<1.96

Escherichia coli ATCC 10536

10 ^x	Water Control (Nc)		Test Procedure (Nd)		Test Procedure (Nd)		Test Procedure (Nd)	
			RTU (500PPM)		200PPM		50PPM	
N	-		0	0	0	0	0	0
-1	-		0	0	0	0	0	0
-2	>330	>330	-	-	-	-	-	-
-3	189	185	-	-	-	-	-	-
Mean	1.87E+06		-	-	-	-	-	-
Lg	6.27		<0.10		<0.10		<0.10	
Nts (count remaining on disc)	>100		0		0		0	
Log Reduction (R)			>6.17		>6.17		>6.17	

Enterococcus hirae ATCC 10541

10 ^x	Water Control (Nc)		Test Procedure (Nd)		Test Procedure (Nd)		Test Procedure (Nd)	
			RTU (500PPM)		200PPM		50PPM	
N	-		0	0	0	0	-	-
-1	-		0	0	0	0	>330	>330
-2	-		-	-	-	-	47	43
-3	>330	>330	-	-	-	-	-	-
-4	76	75	-	-	-	-	-	-
Mean	7.55E+06		-	-	-	-	4.50E+04	
Lg	6.88		<0.10		<0.10		4.65	
Nts (count remaining on disc)	85		0		0		>100	
Log Reduction (R)			>6.78		>6.78		<2.23	

Note:

Viable counts of 1-14 (below the lower limit) are expressed as $<1.4 \times 10^2$ (<2.15 Log)

Viable counts of 0 are expressed as < 0.10 Log

Viable counts >330 for bacteria and yeasts and >165 for mould (higher than the upper limit) are expressed as $> 3.3 \times 10^5$ (>5.52 log) or $> 1.65 \times 10^5$ (>5.22 log)

Nts counts of >100 are expressed as >100

Method Verification:

For Each Test:	
The mean counts used for calculation of N, Nc, Nd, NC and NT are between 14 and 330 for bacteria and yeasts and 14 and 165 for moulds	Yes
$6.57 \leq N \leq 7.10$ for bacteria in dirty conditions and clean conditions (except <i>Pseudomonas aeruginosa</i>) and for <i>Candida albicans</i> in clean conditions	Yes
$7.57 \leq N \leq 8.10$ for <i>Pseudomonas aeruginosa</i> in clean conditions	Yes
$5.57 \leq N \leq 6.10$ for <i>Candida albicans</i> in dirty conditions and <i>Aspergillus brasiliensis</i>	N/A
NC-Nc is not $> \pm 0.3$ log	Yes
NT-Nc is not $> \pm 0.3$ log	Yes
Nts is <100 cfu for active concentrations	Yes
Weighted mean quotient for N is $5 \leq N \leq 15$	Yes
Nc is sufficiently high to demonstrate a 4 lg reduction for bacteria and a 3 lg reduction for fungi	Yes

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.

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****End of test report****

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