

Company Name: Greenex DA

Contact Name: Muhammad Shahid Javeed

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Purchase Order No: N/A

Report Date: 07/08/2020

Melbec Ref Number: 19009a
No. of Samples: 1

Name of Test Product: Greenolyte 200
Batch Number: 160720-1

Sample Details:

Manufacture / Supplier:.....	Greenex DA
Product storage conditions:.....	Ambient
Appearance of the product (as supplied):.....	Clear liquid
Appearance of the product (after dilution):.....	N/A
Appearance of product with interfering substance and test organism:	Clear liquid
Active substance and concentration:.....	HOCL
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: 23/07/20	Test Date: 24/07/20
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Experimental Conditions:

Interfering substance:	Bovine Albumin (clean 0.3g/l)
Test temperature:	18 to 25 °C
Contact time:	45 Seconds
Test organisms:	Pseudomonas aeruginosa ATCC 15442
	Staphylococcus aureus ATCC 6538
	Escherichia coli K12 NCTC 10538
	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.

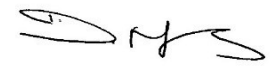
Conclusion:

For the product Greenolyte 200, [160720-1] the log reduction requirements as specified in EN 1276:2019 (5 lg within the relevant contact time) were met.

Testing carried out by:

Name: Gemma Morgan
Position: Technical Manager

Report authorised by:



Name: Dawn Mellors
Position: Technical Director
Date: 07/08/2020

Test Results:

Neutralisation Method Used:

Dilution neutralisation by pour plate

Neutraliser used N1

***Pseudomonas aeruginosa* ATCC
15442**

Validation and controls									Melbec Ref No	19009a	
Validation suspension (Nv_0)			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	62	$\bar{X} =$	Vc 1	58	$\bar{X} =$	Vc 1	52	$\bar{X} =$	Vc 1	56	$\bar{X} =$
Vc 2	62	62	Vc 2	51	54.5	Vc 2	52	52	Vc 2	52	54
$30 \leq \bar{X} \text{ of } Nv_0 \leq 160?$ Yes			$\bar{X} \text{ of A is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ Yes			$\bar{X} \text{ of B is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ Yes			$\bar{X} \text{ of C is } \geq 0.5 \times \bar{X} \text{ of } Nv_0?$ Yes		

Test suspension and test

Test suspension (N and N_0):	N	Vc 1	Vc 2	X_m	$2.95E+08$	$lg N =$	8.47
	10^{-6}	>330	>330	$N_0 = N/10$		$lg N_0 =$	7.47
	10^{-7}	31	28	$7.17 \leq lg N_0 \leq 7.70?$	Yes	$\bar{X} \text{ quotient} = >5 \text{ and } <15?$	N/A

Conc. of the product (%)	Vc 1	Vc 2	$Na = \bar{X} \times 10$	$lg Na$	$lg R$ $N_0 =$	7.47	Contact time	Result
RTU	<14	<14	$1.40E+02$	<2.15		>5.32	45 Seconds	Pass

**Staphylococcus aureus ATCC
6538**

Validation and controls									Melbec Ref No	19009a	
Validation suspension (N_{v_0})			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	111	$\bar{X} =$	Vc 1	81	$\bar{X} =$	Vc 1	80	$\bar{X} =$	Vc 1	101	$\bar{X} =$
Vc 2	80	95.5	Vc 2	78	79.5	Vc 2	74	77	Vc 2	97	99
30 ≤ \bar{X} of N_{v_0} ≤ 160? Yes			\bar{X} of A is ≥ 0.5 x \bar{X} of N_{v_0} ? Yes			\bar{X} of B is ≥ 0.5 x \bar{X} of N_{v_0} ? Yes			\bar{X} of C is ≥ 0.5 x \bar{X} of N_{v_0} ? Yes		

Test suspension and test

	N	Vc 1	Vc 2	X m	3.60E+08	; lg N =	8.56
Test suspension (N and N_0):	10^{-6}	>330	>330	$N_0 = N/10$; lg $N_0 =$	7.56
	10^{-7}	40	32	7.17 ≤ lg N_0 ≤ 7.70?		Yes	
	\bar{X} quotient = >5 and <15?						N/A

Conc. of the product (%)	Vc 1	Vc 2	$N_a = \bar{X} \times 10$	lg N_a	lgR $N_0 =$	7.56	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15		>5.41	45 Seconds	Pass

**Escherichia coli K12 NCTC
10538**

Validation and controls									Melbec Ref No	19009a	
Validation suspension (N_{v_0})			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C) Product conc: RTU		
Vc 1	103	$\bar{X} =$	Vc 1	80	$\bar{X} =$	Vc 1	72	$\bar{X} =$	Vc 1	94	$\bar{X} =$
Vc 2	91	97	Vc 2	77	78.5	Vc 2	54	63	Vc 2	78	86
$30 \leq \bar{X} \text{ of } N_{v_0} \leq 160?$ Yes			$\bar{X} \text{ of A is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ Yes			$\bar{X} \text{ of B is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ Yes			$\bar{X} \text{ of C is } \geq 0.5 \times \bar{X} \text{ of } N_{v_0}?$ Yes		

Test suspension and test

Test suspension (N and N_0):	N	Vc 1	Vc 2	$X_{wm} = 2.78E+08$; $\lg N = 8.44$
	10^{-6}	289	280	$N_0 = N/10$; $\lg N_0 = 7.44$
	10^{-7}	25	17	$7.17 \leq \lg N_0 \leq 7.70?$ Yes $\bar{X} \text{ quotient} = >5 \text{ and } <15?$ 13.55

Conc. of the product (%)	Vc 1	Vc 2	$N_a = \bar{X} \times 10$	$\lg N_a$	$\lg R$ $N_0 =$	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15	7.44 >5.30	45 Seconds	Pass

Enterococcus hirae ATCC 10541

Validation and controls									Melbec Ref No	19009a	
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	69	$\bar{X} =$	Vc 1	66	$\bar{X} =$	Vc 1	60	$\bar{X} =$
Vc 2	68	68.5	Vc 2	64	66.5	Vc 2	60	63	Vc 2	52	56
30 ≤ \bar{X} of N_{v_0} ≤ 160? Yes			\bar{X} of A is ≥ 0.5 x \bar{X} of N_{v_0} ? Yes			\bar{X} of B is ≥ 0.5 x \bar{X} of N_{v_0} ? Yes			\bar{X} of C is ≥ 0.5 x \bar{X} of N_{v_0} ? Yes		

Test suspension and test

Test suspension (N and N_0):	N	Vc 1	Vc 2	$X_{wm} = 2.52E+08$; $\lg N = 8.40$
	10^{-6}	272	233	$N_0 = N/10$; $\lg N_0 = 7.40$
	10^{-7}	29	20	7.17 ≤ $\lg N_0$ ≤ 7.70? Yes \bar{X} quotient = >5 and <15? 10.31

Conc. of the product (%)	Vc 1	Vc 2	$N_a = \bar{X} \times 10$	$\lg N_a$	$N_0 =$	lgR	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15	7.40	>5.25	45 Seconds	Pass