

BS EN 1276:2009

Client Details: Easy Cleaning Solutions Ltd.
Brunel Way
Thetford
IP24 1HF
United Kingdom

Client Contact Name: Andrew Cywinski

Telephone Number: 01842 757 7700
Purchase Order Number: RADPO180

Date Of Report: 24/06/2019

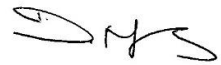
MelBec Reference Number: 10939
No. of samples: 1

Conclusion:

The product Liquid Toilet Cleaner Ocean Fresh (Batch Code: 9095J) met the log reduction requirements as specified in EN 1276 in dirty conditions with a 5 minute contact time.

Testing carried out by:
Danika Weatherburn
Laboratory Manager

Report authorised by:
Dawn Mellors



Technical Director

Sample Details:

Name of Product:	Liquid Toilet Cleaner Ocean Fresh
Batch Number:	9095J
Manufacturer / Supplier:	Easy Cleaning Solutions Ltd.
Product Storage conditions:	Ambient
Appearance of the Product (as supplied):	Blue and viscous
Appearance of the Product (after dilution):	Blue and viscous
Active Substance and concentration:	Benzalkonium Chloride
Product Dilutions/Concentrations and Diluent:	Ready to use

Date Product Received: 19/06/2019**Date Tested:** 19/06/2019**Obligatory Conditions of EN 1276:**

Interfering Substance:	Bovine Albumin
Test Temperature:	20°C
Contact Time:	5 min or 1 min (Hand disinfection)
Test Organisms:	<i>Pseudomonas aeruginosa</i> ATCC 15442, <i>Escherichia coli</i> ATCC 10536, <i>Staphylococcus aureus</i> ATCC 6538, <i>Enterococcus hirae</i> ATCC 10541
Incubation Temperature:	36°C or 37°C

Experimental Conditions:

Interfering Substance:	Bovine Albumin 3.0g/l (Dirty)
Test Temperature:	20°C
Contact Time:	5 Minutes
Test Organisms:	<i>Pseudomonas aeruginosa</i> ATCC 15442, <i>Escherichia coli</i> ATCC 10536, <i>Staphylococcus aureus</i> ATCC 6538, <i>Enterococcus hirae</i> ATCC 10541
Incubation Temperature:	36°C

Test Results:

Membrane Filtration:

Rinsing Liquid: N7

Pseudomonas aeruginosa:

Validation and Controls:

Validation Suspension (Nv ₀)			Experimental Conditions Control (A)			Neutraliser or Filtration Control (B)			Method Validation (Product Conc RTU) (C)		
Vc1		Mean	Vc1		Mean	Vc1		Mean	Vc1		Mean
Vc1	54	5.7 x 10 ¹	Vc1	38	4.35 x 10 ¹	Vc1	48	3.5 x 10 ¹	Vc1	43	4.2 x 10 ¹
Vc2	60		Vc2	49		Vc2	22		Vc2	41	
Is the mean of Nv ₀ between 30 and 160:			Is the mean of A ≥ 0.5 x the mean of Nv ₀			Is the mean of B ≥ 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	Weighted Mean	
				cfu	lgN
1)	10 ⁻⁶	>330	>330	3.2 x 10 ⁸	8.51
2)	10 ⁻⁷	33	31		

N₀:

N ₀ (N/10) =	3.2 10 ⁷	lg N ₀ =	7.51
Is lg N ₀ between 7.17 and 7.70 (required inoculum)		Yes:x	No:

Test (Na and lgR):

% Conc of Product:	Vc1	Vc2	Na (mean of Vc1 & Vc2 x10)	lgNa	lgR (lgN ₀ -lgNa)
1: Ready to use	0-1	0-1	<140	<2.15	>5.36

Staphylococcus aureus:

Validation and Controls:

Validation Suspension (Nv ₀)			Experimental Conditions Control (A)			Neutraliser or Filtration Control (B)			Method Validation (Product Conc RTU) (C)		
Vc1	99	Mean	Vc1	132	Mean	Vc1	118	Mean	Vc1	143	Mean
Vc2	93	9.6 x 10 ¹	Vc2	122	1.27 x 10 ²	Vc2	102	1.10 x 10 ²	Vc2	118	1.31 x 10 ²
Is the mean of Nv ₀ between 30 and 160:			Is the mean of A ≥ 0.5 x the mean of Nv ₀			Is the mean of B ≥ 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	Weighted Mean	
				cfu	lgN
1)	10 ⁻⁶	>330	>330	4.9 x 10 ⁸	8.69
2)	10 ⁻⁷	53	45		

N₀:

N ₀ (N/10) =	4.9 x 10 ⁷	lg N ₀ =	7.69
Is lg N ₀ between 7.17 and 7.70 (required inoculum)		Yes:X	No:

Test (Na and lgR):

% Conc of Product:	Vc1	Vc2	Na (mean of Vc1 & Vc2 x10)	lgNa	lgR (lgN ₀ -lgNa)
1: Ready to Use	0-1	0-1	<140	<2.15	>5.54

E.coli
Validation and Controls:

Validation Suspension (Nv ₀)			Experimental Conditions Control (A)			Neutraliser or Filtration Control (B)			Method Validation (Product Conc RTU) (C)		
Vc1	92	Mean	Vc1	101	Mean	Vc1	102	Mean	Vc1	96	Mean
Vc2	80	8.6 x 10 ¹	Vc2	104	1.025 x 10 ²	Vc2	93	9.75 x 10 ¹	Vc2	104	1.00 x 10 ²
Is the mean of Nv ₀ between 30 and 160:			Is the mean of A ≥ 0.5 x the mean of Nv ₀			Is the mean of B ≥ 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	Weighted Mean	
				cfu	lgN
1)	10 ⁻⁶	>330	>330	4.95 x 10 ⁸	8.69
2)	10 ⁻⁷	48	51		

N₀:

N ₀ (N/10) =	4.95 x 10 ⁷	lg N ₀ =	7.69
Is lg N ₀ between 7.17 and 7.70 (required inoculum)		Yes:x	No:

Test (Na and lgR):

% Conc of Product:	Vc1	Vc2	Na (mean of Vc1 & Vc2 x10)	lgNa	lgR (lgN ₀ -lgNa)
1: Ready to use	0-1	0-1	<140	<2.15	>5.54

Enterococcus hirae

Validation and Controls:

Validation Suspension (N _{v0})			Experimental Conditions Control (A)			Neutraliser or Filtration Control (B)			Method Validation (Product Conc RTU) (C)		
Vc1	84	Mean	Vc1	104	Mean	Vc1	120	Mean	Vc1	121	Mean
Vc2	83	8.35 x 10 ¹	Vc2	100	1.02 x 10 ²	Vc2	129	1.245 x 10 ²	Vc2	121	1.21 x 10 ²
Is the mean of N _{v0} between 30 and 160:			Is the mean of A ≥ 0.5 x the mean of N _{v0}			Is the mean of B ≥ 0.5 x the mean of N _{v0}			Is the mean of C ≥ 0.5 x the mean of N _{v0}		
Yes:x		No:	Yes:x		No:	Yes:x		No:	Yes:x		No:

Test Suspension: (N & N₀):

N:

Dilution:	Vc1 (include individual counts and total)	Vc2 (include individual counts and total)	Weighted Mean	
			cfu	lgN
1) 10 ⁻⁶	>330	>330	4.50 x 10 ⁸	8.65
2) 10 ⁻⁷	45	45		

No:

N ₀ (N/10) =	4.50 x 10 ⁷	lg N ₀ =	7.65
Is lg N ₀ between 7.17 and 7.70 (required inoculum)		Yes:	No:

Test (Na and IgR):

% Conc of Product:	Vc1 (include individual counts and total)	Vc2 (include individual counts and total)	Na (mean of Vc1 & Vc2 x10)	IgNa	IgR (lgN ₀ -lgNa)
1: Ready to use	0-1	0-1	<140	<2.15	>5.50