Company Name: Solupak Limited

Contact Name: Alex Thompson

Contact Email: Alex.thompson@solupak.com/ sales@solupak.com

Purchase Order No: POR004764

Report Date: 24/05/2021

Melbec Ref Number: 27813.1
No. of Samples: 1

Name of Test Product: Surface Sanitiser
Batch Number: V1230

Test Report for a General-Purpose Disinfectant Product
BS EN 1276:2019

UKAS TESTING 8615

Sample Details:

Manufacture / Supplier:…………………………………………………………	Solupak Limited
Product storage conditions:…………………………………………………	Ambient
Appearance of the product (as supplied):……………………………………	Clean colourless liquid
Appearance of the product (after dilution):…………………………………	Clean colourless liquid
Appearance of product with interfering substance and test organism:	Slightly cloudy liquid
Active substance and concentration:………………………………………	Lonzabac
Product dilution preparation……………………………………………………	Volume/Volume
Product dilutions/concentrations:……………………………………………	Ready to Use (RTU), 50% and 1 %
Diluent used to dilute product:………………………………………………	Sterile Deionised Water
Incubation temperature: ………………………………………………………	35 ^{o}C to 38°C

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

Date product received:　　　17/05/21　　　　　　　　　Test Date:　　　　20/05/21

Experimental Conditions:

Interfering substance:　Bovine Albumin (dirty 3.0g/l)
Test temperature:　18 to 25 ^{o}C
Contact time:　30 seconds
Test organisms:　*Pseudomonas aeruginosa ATCC 15442*
　　　　　　　Staphylococcus aureus ATCC 6538
　　　　　　　Escherichia coli ATCC 10536
　　　　　　　Enterococcus hirae ATCC 10541

Deviations:

EN1276 states incubation temperature of 36±1°C or 37±1°C. Melbec Microbiology Ltd method states 35°C - 38°C.

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 Sanitiser, [Batch code: V1230] the log reduction requirements as specified in EN 1276:2019 (5 lg within the relevant contact time) were met in dirty conditions with a contact time of 30 seconds.

Report authorised by:
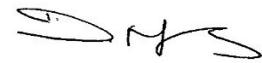
Name: Dawn Mellors
Position: Technical Director
Date: 24/05/2021

Test Results:

Neutralisation Method Used:

Membrane filtration

Rinsing Liquid Used: N7

MTF.5.10.44 Issue 4

Test Report for a General-Purpose Disinfectant Product
BS EN 1276:2019

Melbec Microbiology

UKAS TESTING 8615

Pseudomonas aeruginosa ATCC 15442

| Validation and controls | | | Melbec Ref No | 27813.1 |

Validation suspension (Nv_0)			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C)		
Vc 1	78	$\overline{X}$ =	Vc 1	89	$\overline{X}$ =	Vc 1	83	$\overline{X}$ =	Vc 1	68	$\overline{X}$ =
Vc 2	59	68.5	Vc 2	78	83.5	Vc 2	69	76	Vc 2	53	60.5
$30 \leq \overline{X}$ of $Nv_0 \leq 160$?			$\overline{X}$ of A is $\geq 0.5 \times \overline{X}$ of Nv_0?			$\overline{X}$ of B is $\geq 0.5 \times \overline{X}$ of Nv_0?			$\overline{X}$ of C is $\geq 0.5 \times \overline{X}$ of Nv_0?		
Yes			**Yes**			**Yes**			**Yes**		

Test suspension

Test suspension (N and N_0):	N	Vc 1	Vc 2			
	10^{-6}	>330	>330	X m 3.90E+08 ; lg N = 8.59		
				$N_0 = N/10$; lg N_0= 7.59		
	10^{-7}	41	37	$7.17 \leq \lg N_0 \leq 7.70$? Yes		
				$\overline{X}$ quotient = >5 and <15? N/A		

Bactericidal activity results

Conc. of the active (%)	Vc 1	Vc 2	$Na = \overline{X} \times 10$	lgNa	lg$R$ N_0 = 7.59		Contact time	Result
RTU	<14	<14	1.40E+02	<2.15		>5.44	30 seconds	**Pass**
50.00	<14	<14	1.40E+02	<2.15		>5.44	30 seconds	**Pass**
1.00	>165	>165	1.65E+03	>3.22		<4.37	30 seconds	**Fail**

MTF.5.10.44 Issue 4

Test Report for a General-Purpose Disinfectant Product
BS EN 1276:2019

Melbec Microbiology

UKAS TESTING 8615

Staphylococcus aureus ATCC 6538

Validation and controls

Melbec Ref No	27813.1

Validation suspension (Nv_0)			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C)		
Vc 1	80	$\overline{x}$ =	Vc 1	88	$\overline{x}$ =	Vc 1	83	$\overline{x}$ =	Vc 1	87	$\overline{x}$ =
Vc 2	65	72.5	Vc 2	60	74	Vc 2	65	74	Vc 2	66	76.5
$30 \le \overline{x}$ of $Nv_0 \le 160$?			$\overline{x}$ of A is ≥ 0.5 x $\overline{x}$ of Nv_0?			$\overline{x}$ of B is ≥ 0.5 x $\overline{x}$ of Nv_0?			$\overline{x}$ of C is ≥ 0.5 x $\overline{x}$ of Nv_0?		
Yes			**Yes**			**Yes**			**Yes**		

Test suspension

Test suspension (N and N_0):	N	Vc 1	Vc 2			
				X m	3.85E+08	; lg N = 8.59
	10^{-6}	>330	>330	$N_0 = N/10$; lg N_0=		7.59
	10^{-7}	46	31	$7.17 \le$ lg$N_0 \le 7.70$?		Yes
				$\overline{x}$ quotient = >5 and <15?		N/A

Bactericidal activity results

Conc. of the active (%)	Vc 1	Vc 2	$Na = \overline{x}$ x10	lgNa	lg$R$ $N_0 =$	7.59	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15		>5.44	30 seconds	**Pass**
50	<14	<14	1.40E+02	<2.15		>5.44	30 seconds	**Pass**
1.00	>165	>165	1.65E+03	>3.22		<4.37	30 seconds	**Fail**

MTF.5.10.44 Issue 4

Escherichia coli ATCC 10536

| Validation and controls | | | | | | | | | | | Melbec Ref No | 27813.1 |

Validation and controls — **Melbec Ref No** 27813.1

Validation suspension (Nv_0)			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C)		
Vc 1	108	$\bar{x} =$	Vc 1	121	$\bar{x} =$	Vc 1	104	$\bar{x} =$	Vc 1	102	$\bar{x} =$
Vc 2	104	106	Vc 2	98	109.5	Vc 2	98	101	Vc 2	93	97.5
$30 \leq \bar{x}$ of $Nv_0 \leq 160$?			$\bar{x}$ of A is $\geq 0.5 \times \bar{x}$ of Nv_0?			$\bar{x}$ of B is $\geq 0.5 \times \bar{x}$ of Nv_0?			$\bar{x}$ of C is $\geq 0.5 \times \bar{x}$ of Nv_0?		
Yes			**Yes**			**Yes**			**Yes**		

Test suspension

Test suspension (N and N_0):		N	Vc 1	Vc 2	X m 5.00E+08 ; lg N = 8.70
		10^{-6}	>330	>330	$N_0 = N/10$; lg N_0= 7.70
		10^{-7}	50	50	$7.17 \leq \lg N_0 \leq 7.70$? Yes
					$\bar{x}$ quotient = >5 and <15? N/A

Bactericidal activity results

Conc. of the active (%)	Vc 1	Vc 2	$Na = \bar{x} \times 10$	lgNa	lg$R$ $N_0 =$ 7.70	Contact time	Result
RTU	<14	<14	1.40E+02	<2.15	>5.55	30 seconds	**Pass**
50.00	<14	<14	1.40E+02	<2.15	>5.55	30 seconds	**Pass**
1.00	>165	>165	1.65E+03	>3.22	<4.48	30 seconds	**Fail**

MTF.5.10.44 Issue 4

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8615

Enterococcus hirae ATCC 10541

Validation and controls		Melbec Ref No	27813.1

Validation suspension (Nv_0)			Experimental conditions control (A)			Neutralizer control (B)			Method validation (C)		
Vc 1	102	$\bar{x} =$	Vc 1	94	$\bar{x} =$	Vc 1	102	$\bar{x} =$	Vc 1	86	$\bar{x} =$
Vc 2	90	96	Vc 2	89	91.5	Vc 2	94	98	Vc 2	85	85.5
$30 \le \bar{x}$ of $Nv_0 \le 160$?			$\bar{x}$ of A is $\ge 0.5 \times \bar{x}$ of Nv_0?			$\bar{x}$ of B is $\ge 0.5 \times \bar{x}$ of Nv_0?			$\bar{x}$ of C is $\ge 0.5 \times \bar{x}$ of Nv_0?		
Yes			**Yes**			**Yes**			**Yes**		

Test suspension

		N	Vc 1	Vc 2			
Test suspension (N and N_0):					X m	4.95E+08	; lg N = 8.69
		10^{-6}	>330	>330	$N_0 = N/10$; lg N_0=		7.69
		10^{-7}	53	46	$7.17 \le \lg N_0 \le 7.70$?		Yes
					$\bar{x}$ quotient = >5 and <15?		N/A

Bactericidal activity results

Conc. of the active (%)	Vc 1	Vc 2	$Na = \bar{x} \, x10$	lgNa	lg$R$ N_0 = 7.69		Contact time	Result
RTU	<14	<14	1.40E+02	<2.15		>5.55	30 seconds	**Pass**
50.00	<14	<14	1.40E+02	<2.15		>5.55	30 seconds	**Pass**
1.00	>165	>330	1.65E+03	>3.22		<4.48	30 seconds	**Fail**

MTF.5.10.44 Issue 4