

## Biofilm kill performance of CleanCert against *S. Aureus* & *P. Aeruginosa* (conducted by 5DHPG- Jun 2016)

	<i>S. aureus</i>											
	24-Hour Biofilms						72-Hour Biofilms					
Treatment Time	1		5		15		1		5		15	
Antimicrobial	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)
Cleancert	3.09 ± 0.25	99.91	3.20 ± 0.26	99.94	3.33 ± 0.09	99.95	2.0 ± 0.21	98.99	3.37 ± 0.35	99.96	<b>5.07</b>	<b>99.99</b>
Asepticcate (4%)	1.59 ± 1.56	97.41	0.40 ± 0.05	59.90	0.71 ± 0.11	80.51	0.34 ± 0.37	54.09	0.70 ± 0.05	79.86	0.70 ± 0.02	80.25
Untreated control	Mean Log <sub>10</sub> density of 6.93 ± 0.05 LR - 0 Kill (%) - 0						Mean Log <sub>10</sub> density of 7.58 ± 0.05 LR - 0 Kill (%) - 0					

**Table 6A. Log reduction (LR) and percentage kill (%) values of *S. aureus* biofilms.**

Biofilms were cultured for 24 or 72 hours in a CDC biofilm reactor before treatment with CleanCert (neat), or Asepticcate (Neat 4%) for 1, 5 or 15 minutes. Samples were performed in duplicate. Mean Log values were calculated and the standard error (SE) of the mean LR was determined (LR ± SE). Given that the log of zero is mathematically undefined, in cases whereby no colonies were detected following antimicrobial treatment, the value of 0.5 colony-forming units was used to calculate LR values. Therefore LR values of 5.07 (highlighted

in bold) indicate that no colonies of bacteria were detected following antimicrobial treatment and sampling. The Mean Log<sub>10</sub> density of untreated controls was calculated ( $\pm$  standard deviation).

	<i>P. aeruginosa</i>											
	24-Hour Biofilms						72-Hour Biofilms					
Treatment Time	1		5		15		1		5		15	
Antimicrobial	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)	LR	Kill (%)
Cleancert	2.86 $\pm$ 0.92	99.86	2.44 $\pm$ 2.32	99.63	<b>5.07</b>	<b>99.99</b>	0.84 $\pm$ 0.98	85.61	3.92 $\pm$ 1.21	99.99	<b>5.07</b>	<b>99.99</b>
Asepticcate (4%)	0.77 $\pm$ 0.08	83.018	1.68 $\pm$ 0.05	97.92	2.31 $\pm$ 0.10	99.51	2.10 $\pm$ 0.05	99.22	2.35 $\pm$ 0.02	99.56	1.31 $\pm$ 0.12	95.07
Untreated control	Mean Log <sub>10</sub> density of 7.62 $\pm$ 0.03 LR - 0 Kill (%) - 0						Mean Log <sub>10</sub> density of 7.83 $\pm$ 0.15 LR - 0 Kill (%) - 0					

**Table 6B. Log reduction (LR) and percentage kill (%) values of *P. aeruginosa* biofilms.**

Biofilms were cultured for 24 or 72 hours in a CDC biofilm reactor before treatment with Cleancert (neat), or Asepticcate (Neat 4%) for 1, 5 or 15 minutes. Samples were performed in duplicate. Mean Log values were calculated and the standard error (SE) of the mean LR was determined (LR  $\pm$  SE). Given that the log of zero is mathematically undefined, in cases whereby no colonies were detected following antimicrobial treatment, the value of 0.5 colony-forming units was used to calculate LR values. Therefore LR values of 5.07 (highlighted in bold) indicate that no colonies of bacteria were detected following antimicrobial treatment and sampling. The Mean Log<sub>10</sub> density of untreated controls was calculated ( $\pm$  standard deviation)