

Time Kill Study for Silver-Sept™ Antimicrobial Skin and Wound Gel

Antimicrobial Activity

TIME KILL STUDIES: The time kill studies for Silver-Sept™ Silver Antimicrobial Skin and Wound Gel, were conducted in the presence of an interfering substance that simulates the organic load conditions of the wound environment and is known to inhibit the action of antimicrobial agents.

Test Organisms:		Table 1 – Antimicrobial Activity			
Bacteria:	INITIAL ORGANISM COUNT	EXPOSURE TIME / % KILL			
		1 hour	2 hours	1 day	
Escherichia coli	10 ⁷	99.99985%	100 %	100 %	
Staphylococcus aureus	10 ⁷	99.77%	100 %	100 %	
Methicillin Resistant Staphylococcus aureus (MRSA)	10 ⁷	98.32%	100 %	100 %	
Vancomycin Resistant Enterococcus faecalis (VRE)	10 ⁷	98.27%	100 %	100 %	
Pseudomonas aeruginosa	10 ⁷	99.9996%	100 %	100 %	
Proteus mirabilis	10 ⁷	99.9998 %	100 %	100 %	
Serratia marcescens	10 ⁷	99.9538%	100 %	100 %	
Fungi:					
Candida albicans	10 ⁶	99.1 %	99.9 %	100 %	
Aspergillus niger	10 ⁶	99.99 %	99.9999 %	100 %	

TIME KILL STUDIES: The time kill studies for Silver-Sept™ Silver Antimicrobial Skin and Wound Gel, were conducted by inoculating high level of test organisms, repeatedly for three consecutive days.

Test Organisms:		Table 2 – Repeated Exposure Time Kill Study						
Bacteria:		EXPOSURE TIME / % KILL						
		2nd day						4 days after 3rd
		1 day after	2nd	1 day after	3rd	3rd day, 1 day		inoculation, and
		initial test	inoculation	2nd	inoculation	after 3rd		1 week after initial
		inoculum	inoculation after day 1	inoculation	after day 2	inoculation		inoculation
Escherichia coli	10 ⁷	100 %	10 ⁷	100 %	10 ⁷	100 %		100 %
Staphylococcus aureus	10 ⁷	100 %	10 ⁷	100 %	10 ⁷	100 %		100 %
Methicillin Resistant Staphylococcus aureus (MRSA)	10 ⁷	100 %	10 ⁷	100 %	10 ⁷	100 %		100 %
Pseudomonas aeruginosa	10 ⁷	100 %	10 ⁷	100 %	10 ⁷	100 %		100 %
Serratia marcescens	10 ⁷	100 %	10 ⁷	100 %	10 ⁷	100 %		100%
Fungi:								
Candida albicans	10 ⁶	100 %	10 ⁶	100 %	10 ⁶	100 %		100%
Aspergillus niger	10 ⁶	98.667 %	10 ⁶	98.333%	10 ⁶	99.5%		100%