

ANTIBACTERIAL AND VIRUCID EFFICIENCY OF FN NANO® TECHNOLOGY

Type		Microorganism	Product	Duration	UV Intensity	Reduction	
Bacteria		Staphylococcus aureus	FN NANO® 2	60 min	0,05-0,1 mW/cm ²	99,999%	
		Staphylococcus aureus	FN NANO® BioMax	5 hours	0,1 mW/cm ²	99,999%	
		Staphylococcus aureus	FN NANO® BioMax	5 hours	no light	89,737%	
		Staphylococcus aureus	FN NANO® BioMax	24 hours	no light	97,543%	
		MRSA Methicillin-resistant Staphylococcus aureus	FN NANO® 2	8 hours	0,05-0,1 mW/cm ²	99,490%	
		MRSA Methicillin-resistant Staphylococcus aureus	FN NANO® 3	8 hours	0,05-0,1 mW/cm ²	98,364%	
		MRSA Methicillin-resistant Staphylococcus aureus	FN NANO® BioMax	5 hours	0,1 mW/cm ²	95,331%	
		MRSA Methicillin-resistant Staphylococcus aureus	FN NANO® BioMax	5 hours	no light	79,519%	
		MRSA Methicillin-resistant Staphylococcus aureus	FN NANO® BioMax	24 hours	0,1 mW/cm ²	99,999%	
		MRSA Methicillin-resistant Staphylococcus aureus	FN NANO® BioMax	24 hours	no light	93,184%	
		Escherichia coli	FN NANO® 2	8 hours	0,05-0,1 mW/cm ²	99,993%	
		Escherichia coli	FN NANO® 3	8 hours	0,05-0,1 mW/cm ²	99,967%	
		Escherichia coli	FN NANO® BioMax	5 hours	0,1 mW/cm ²	99,999%	
		Escherichia coli	FN NANO® BioMax	5 hours	no light	99,139%	
			Salmonela enterica	FN NANO® 2	8 hours	0,05-0,1 mW/cm ²	99,658%
			Salmonela enterica	FN NANO® 3	8 hours	0,05-0,1 mW/cm ²	99,865%
			Pseudomonas aeruginosa	FN NANO® 2	120 min	0,05-0,1 mW/cm ²	100,000%
			Pseudomonas aeruginosa	FN NANO® BioMax	5 hours	0,1 mW/cm ²	99,999%
	Enterococcus faecalis		FN NANO® 2	120 min	0,1-0,3 mW/cm ²	99,999%	
	Bacillus subtilis (spory)		FN NANO® BioMax	24 hours	0,1 mW/cm ²	90,227%	
Virus		SARS-CoV-2; COVID-19	FN NANO® 2	10 min	0,35-0,5 mW/cm ²	99,709%	
		SARS-CoV-2; COVID-19	FN NANO® 2	30 min	0,35-0,5 mW/cm ²	99,990%	
		SARS-CoV-2; COVID-19	FN NANO® 2	60 min	0,35-0,5 mW/cm ²	100,000%	
		Residual viral COVID-19 RNA copies	FN NANO® 2	120 min	0,35-0,5 mW/cm ²	100,000%	
		Bakteriofag E.Coli ΦX 174 (model virus)	FN NANO® 2	60 min	0,05-0,1 mW/cm ²	99,997%	
		Vaccinia virus Ankara (enveloped virus)	FN NANO® BioMax	24 hours	no light	99,653%	
		Vaccinia virus Ankara (enveloped virus)	FN NANO® BioMax	24 hours	0,1 mW/cm ²	99,978%	
		Murine norovirus (non-enveloped virus)	FN NANO® BioMax	24 hours	0,1 mW/cm ²	99,916%	
		Murine norovirus (non-enveloped virus)	FN NANO® BioMax	24 hours	no light	98,797%	
Yeast		Candida albicans	FN NANO® 2	120 min	0,05-0,1 mW/cm ²	100,000%	
Candida albicans		FN NANO® BioMax	24 hours	0,1 mW/cm ²	99,826%		
Fungi		Aspergillus brasiliensis	FN NANO® BioMax	24 hours	0,1 mW/cm ²	90,000%	



EMSL ANALYTICAL, INC.

*tested by independent institutions in the Czech Republic and abroad (State Institute of Public Health, Institute of Public Health Ostrava, Institute of Public Health Ústí nad Labem, University of Nevada, EMSL Analytical and others)