



OPS[®] INSTANT Hand Sanitizer

TECHNICAL SPECIFICATIONS

ARCHER OPS INSTANT Hand Sanitizer which active ingredient is Benzalkonium has distinct advantages over gelled alcohol sanitizers. While both are fast acting and allow for use without water or towels, OPS INSTANT Hand Sanitizer is Non-flammable, less drying to the skin and will not stain clothing.

Published studies report that alcohol gelled sanitizers actually make skin dirtier, not cleaner due to removal of protective natural skin oils and entrapment of dead skin cells by the polymer thickeners used in gelled alcohol products.

EFFICACY DATA SUMMARY FOR THE OPS INSTANT HAND SANITIZER

Organism	%Reduction
Staphylococcus aureus.....	99.99
Clostridium difficile	>99.9999
Enterococcus faecalis VRE	99.99
Escherichia coli.....	99.999
Escherichia coli 0157:H7	>99.999
Klebsiella pneumoniae.....	99.999
Salmonella typhi	99.999
Pseudomonas aeruginosa	>99.9999
Streptococcus pneumonia.....	>99.9999
Streptococcus pyogenes	>99.99
Staphylococcus Aureus-MRSA.....	99.999

ARCHER Manufacturing's OPS INSTANT Hand Sanitizer is used through the Patented TURTLE Prison Security Hand Soap Dispenser or any foaming Dispenser.

SAFE FOR USE

ARCHER OPS INSTANT Foaming Hand Sanitizer is very effective at reducing bacteria on the skin, yet very gentle on the skin and eyes as the Toxicity Profile indicates (see next page).

TOXICITY PROFILE — ARCHER INSTANT HAND SANITIZER	
Acute Oral LD ₅₀	>5.0 g/kg, Category IV
Acute Dermal LD ₅₀	>2.0 g/kg, Category III
Eye Irritation	Category III
Skin Irritation	Category IV
Sensitization	Not a Skin Sensitizer

EXPOSURE TIME 15 SECONDS

ORGANISM	TEST POPULATION CONTROL (CFU/ML)	NUMBER OF SURVIVORS	%REDUCTION (CFU/ML)	LOG REDUCTION
Campylobacter jejuni ATCC 29428	1.02 X 10 ⁷	<1 X 10 ²	>99.999	>5.00 Log ¹⁰
Candida albicans ATCC 10231	1.60 X 10 ⁵	6.0 X 10 ³	96.3	1.42 Log ¹⁰
Clostridium difficile ATCC 9689	3.40 X 10 ⁶	<2	>99.9999	>6.20 Log ¹⁰
Enterococcus faecalis Vancomycin Resistant (VRE) ATCC 51575	1.12 X 10 ⁶	3.2 X 10 ¹	99.99	4.54 Log ¹⁰
Escherichia coli ATCC 11229	3.80 X 10 ⁶	4	99.999	6.00 Log ¹⁰
Escherichia coli O157:H7 ATCC 35150	1.26 X 10 ⁶	<2	>99.999	>5.80 Log ¹⁰
Klebsiella pneumoniae ATCC 4352	1.10 X 10 ⁶	2	99.999	5.70 Log ¹⁰
Listeria monocytogenes ATCC 19117	4.7 X 10 ⁶	1.9 X 10 ³	99.9	3.39 Log ¹⁰
Pseudomonas aeruginosa ATCC 15442	3.5 X 10 ⁶	<2	99.9999	>6.20 Log ¹⁰
Salmonella choleraesuis serotype enteritidis ATCC 4931	6.8 X 10 ⁵	2	>99.999	5.50 Log ¹⁰
Salmonella choleraesuis serotype paratyphi ATCC 8759	5.6 X 10 ⁵	<2	>99.999	>5.50 Log ¹⁰
Salmonella choleraesuis serotype pullorum ATCC 19945	8.9 X 10 ⁵	<2	>99.999	>5.70 Log ¹⁰
Salmonella choleraesuis serotype typhimurium ATCC 23564	7.7 X 10 ⁵	6	>99.999	>5.10 Log ¹⁰
Salmonella typhi ATCC 6539	1.27 X 10 ⁶	2	99.999	5.80 Log ¹⁰
Shigella dysenteriae ATCC 13313	1.3 X 10 ⁶	<2	>99.999	>5.80 Log ¹⁰
Shigella flexneri ATCC 12022	1.39 X 10 ⁶	2.8 X 10 ¹	99.99	4.69 Log ¹⁰
Shigella sonnei ATCC 25931	2.43 X 10 ⁷	2.0 X 10 ¹	99.9999	6.09 Log ¹⁰
Staphylococcus aureus ATCC 6538	6.7 X 10 ⁶	<2	>99.9999	>6.53 Log ¹⁰
★ Staphylococcus aureus Methicillin Resistant (MRSA) ATCC 33592 ★	1.23 X 10 ⁷	3.8 X 10 ³	>99.9	3.51 Log ¹⁰
Staphylococcus epidermidis ATCC 12228	7.2 X 10 ⁵	<2	99.999	5.56 Log ¹⁰
Streptococcus pneumonia ATCC 6305	6.4 X 10 ⁵	<2	>99.999	>5.51 Log ¹⁰
Streptococcus pyogenes ATCC 19615	1.77 X 10 ⁶	<2	>99.999	>5.90 Log ¹⁰
Vibrio cholera ATCC 11623	4.7 X 10 ⁵	<2	>99.999	>5.40 Log ¹⁰
Xanthomonas axonopodis (Citrus Canker) ATCC 49118	1.28 X 10 ⁶	3.6 X 10 ¹	>99.99	4.55 Log ¹⁰
Yersinia enterocolitica ATCC 23715	2.23 X 10 ⁶	3.8 X 10 ¹	99.99	4.77 Log ¹⁰