



Hand Shields' active ingredient , BZK, kills 99.9% of illness-causing germs* on contact. Listed are the most prevalent bacterial pathogens tested.



HANDSHIELD
Hand Sanitizer

Campylobacter jejuni	Listeria monocytogenes	Shigella sonnei
Candida albicans	Pseudomonas aeruginosa	Staphylococcus aureus
Clostridium difficile	Salmonella choleraesuis serotype enteritidis	Staphylococcus epidermidis
Enterococcus faecalis	Salmonella choleraesuis serotype paratyphi	Streptococcus pneumonia
Vancomycin Resistant (VRE)	Salmonella choleraesuis serotype pullorum	Streptococcus pyogenes
Escherichia coli	Salmonella choleraesuis serotype typhimurium	Vibrio cholera
Escherichia coli 0157:H7	Salmonella typhi	Xanthomonas axonopadis (Citrus Canker)
Klebsiella pneumoniae	Shigella dysenteriae	Yersinia enterocolitica
NDM-1 positive	Shigella flexneri	

Time Kill Assay - American Society for Testing and Materials (ASTM). E2315-03. Guide for Assessment of Microbicidal Activity Using a Kill-Time Procedure, Volume 11.05, Copyright 2005 ASTM International.

- *Kills 99.9% of most common germs that may cause illness.

AQUA



SHIELD



EFFICACY STUDY DATA

Hand Sanitizer Product	Lot #	Active Ingredient	15 Seconds	30 Seconds	45 Seconds	1 Hour	4 Hours	8 Hours	24 Hours
Hand Shield	#21 16	.1% Benzalkonium Chloride (BZK)	0	0	0	0	0	8	16
The Leading Advanced Hand Sanitizer Gel	#108722	70% Ethyl Alcohol	34	67	143	409	634	192	290

ATP Levels of Clean	ATP Count	Description
Ultra Clean	0-10	Sterile surfaces and food prep areas
Very Clean	11-30	Critical touch points
Good Clean	31-80	Floor requirement, and typical microfiber towel performance
Somewhat Clean	81-200	Surface should be cleaned and has some risk of contamination from disease-causing bacteria
Dirty	201-500	Surface needs cleaning and has medium risk of contamination from disease-causing bacteria
Very Dirty	501-1000	Surface needs cleaning and has medium to high risk of contamination from disease-causing bacteria
Filthy	>1000	Surface needs cleaning and has high risk of contamination from disease-causing bacteria

The detection of adenosine triphosphate (ATP), the universal unit of energy in all microbial living cells, indicates the presence of biological matter, and determines if surfaces are clean. While most hospitals use the recommendations above, it is possible to create custom limit for test locations. For detailed instructions on establishing Pass/Fail limits or for using Hygiena's ATP cleaning verification system, visit www.hygiene.com.