Fisher Science Education

OSM inc. Natural Solutions for a Natural World

Alcohol-free Hand Sanitizers

INFORMATIONAL DATA SHEET

OSM Hand Sanitizers are alcohol and fragrance free, non-flammable and non-toxic. Effective protection anywhere germs or irritants are found.

OSM Hand Sanitizers are unique, patented, FDA compliant skin antiseptics containing a broad spectrum of antimicrobial activity that forms a protective film on healthy skin. Each protective molecule is surrounded by PERSISTENT antimicrobial activity to inhibit the growth of and kill a wide range of potential disease-causing bacterial pathogens and microorganisms. As an over-the-counter waterless hand disinfectant, they can be used to provide protection where sinks are not readily available or in-between regular hand washings.

OSM Hand Sanitizers protect against self and/or cross contamination of bacteria. They significantly reduce bacterial pathogens that cause disease on contact. One dime sized amount of OSM Hand Sanitizer has been clinically proven to be extremely effective in killing 99.99% of common germs and bacteria that may cause illness, including MRSA and C-diff. It takes more than 240 applications of an alcohol based sanitizing gel to equal the effectiveness of a single application of OSM Hand Sanitizer. Implementing these products into your daily hygienic routine can help significantly reduce the chances of becoming sick by up to 85%. Unlike alcohol based gels which dry out the skin, OSM Hand Sanitizers moisturize and improve the skin with continued use.

Qualifies As USDA BioPreferred℠
Products for Federal Preferred Procurement

OSM, Inc. Is pleased to offer USDA BioPreferred designated products. For more info about the BioPreferred program, visit www.biopreferred.gov

BENZALKONIUM CHLORIDE

Benzalkonium Chloride is an **alcohol free and fragrance free** antimicrobial compound that has been widely used in the health care industry for more than 50 years. It has been used in formulas for surface cleaners, sterilizing agents, and leave-on FDA Monograph antibacterial skin treatment products. Its chemical properties make it an excellent candidate for persistent antimicrobial activity on skin.

PART NUMBERS

OSM Hand Sani	Part number
1.7 OZ FOAM	S95976
7.1 OZ FOAM	S01537A
100 CT WIPE	S01536

OSM Hand Sani	Part number
2 OZ SPRAY	S01682
2 OZ SPRAY 72/CS	S01681
8 OZ SPRAY	S01683
GALLON REFILL	S01709

Dispensers	Part number
MANUAL	S01711
TOUCHLESS	S01710
BRACKET	S01713
STAND	S01712

COMPARISON CHART — OSM HAND SANITIZER VS. ISOPROPYL ALCOHOL

OSM Hand Sanitizer	Standard Alcohol Gels
Instant Germ Killer w/ Extended Protection	Instant Germ Killer (no residual effects)
Remains Effective After Hand Washing	Evaporates / Washes Off w/ Water
Alcohol and Petroleum Free	Alcohol Based
Contains Skin Conditioners & Moisturizers	Most Do Not Contain Emollients and Moisturizers
Soothes and Moisturizes Dry Skin	Extremely Drying to Skin
Helps Improve the Quality of Skin	Causes Irritation and Flaking of Skin
Reapply Every 2-4 Hours	Must Reapply Every 10 Minutes
Non-flammable	Flammable
Fragrance Free	Alcohol Odor

APPLICATIONS

Physician Offices
Hospitals & Clinics
Traveling Nurses
VA Medical Centers
Nursing Homes
Veterinary Offices & Clinics
Laboratories
Day Care Centers
Preschools, K-12
Colleges & Universities

WHAT DOES THIS MEAN TO YOU...

- Once alcohol gel dries, you are no longer protected from germs because there is NO persistent antimicrobial activity.
- Alcohol gels are flammable, as they usually contain at least 60% or more of either Isopropyl Alcohol (IPA) or Ethyl Alcohol (Ethanol). Alcohol sanitizers can create a fire hazard in areas where an ignition source is present.
- IPA and Ethanol can be toxic if ingested. Alcohol gels should be kept out of the reach of children. If consumed, children or adults may become sick or poisoned. IPA can cause blindness if swallowed or comes in contact with eyes.
- Alcohols are drying and remove the natural oils found in the skin, making your skin more susceptible to germs and infections. OSM Hand Sanitizer moisturizes and conditions your skin and helps to heal damaged skin with regular use.
- OSM Hand Sanitizer is fragrance free and won't leave the essential oils associated with many fragrances that can cause allergic reactions

BN 0512091

OSM Hand Sanitizer Products

Time Kill Study

This study is designed to examine the rate of kill of a test substance after inoculation with a test organism.
Results are expressed in percent reduction and log reduction of the test organism.
Exposure time 15 Seconds

Organism	Test Population Control (CFU/ml)	Number of Survivors (CFU/ml)	% Reduction	Log Reduction
Campylobacter jejuni ATCC 29428	1.02×10^7	$<1 \times 10^2$	>99.999	>5.00 Log_{10}
Candida albicans ATCC 10231	1.60×10^5	6.0×10^3	96.3	1.42 Log_{10}
Clostridium difficile ATCC 9689	3.40×10^6	<2	>99.9999	>6.20 Log_{10}
Enterococcus faecalis Vancomycin Resistant (VRE) ATCC 51575	1.12×10^6	3.2×10^1	99.99	4.54 Log_{10}
Escherichia coli ATCC 11229	3.80×10^6	4	99.999	6.00 Log_{10}
Escherichia coli O157:H7 ATCC 35150	1.26×10^6	<2	>99.999	>5.80 Log_{10}
Klebsiella pneumoniae ATCC 4352	1.10×10^6	2	99.999	5.70 Log_{10}
Listeria monocytogenes ATCC 19117	4.7×10^6	1.9×10^3	99.9	3.39 Log_{10}
Pseudomonas aeruginosa ATCC 15442	3.5×10^6	<2	99.9999	>6.20 Log_{10}
Salmonella choleraesuis serotype enteritidis ATCC 4931	6.8×10^5	2	>99.999	5.50 Log_{10}
Salmonella choleraesuis serotype paratyphi ATCC 8759	5.6×10^5	<2	>99.999	>5.50 Log_{10}
Salmonella choleraesuis serotype pullorum ATCC 19945	8.9×10^5	<2	>99.999	>5.70 Log_{10}
Salmonella choleraesuis serotype typhimurium ATCC 23564	7.7×10^5	6	>99.999	>5.10 Log_{10}
Salmonella typhi ATCC 6539	1.27×10^6	2	99.999	5.80 Log_{10}
Shigella dysenteriae ATCC 13313	1.3×10^6	<2	>99.999	>5.80 Log_{10}
Shigella flexneri ATCC 12022	1.39×10^6	2.8×10^1	99.99	4.69 Log_{10}
Shigella sonnei ATCC 25931	2.43×10^7	2.0×10^1	99.9999	6.09 Log_{10}
Staphylococcus aureus ATCC 6538	6.7×10^6	<2	>99.9999	>6.53 Log_{10}
Staphylococcus aureus Methicillin Resistant (MRSA) ATCC 33592	1.23×10^7	3.8×10^3	>99.9	3.51 Log_{10}
Staphylococcus aureus Community Associated Methicillin Resistant (MRSA) NARSA NRS 123, Genotype USA400	1.18×10^6	5.8×10^2	>99.9	>3.30 Log_{10}
Staphylococcus epidermidis ATCC 12228	7.2×10^5	<2	99.999	5.56 Log_{10}
Streptococcus pneumonia ATCC 6305	6.4×10^5	<2	>99.999	>5.51 Log_{10}
Streptococcus pyogenes ATCC 19615	1.77×10^6	<2	>99.999	>5.90 Log_{10}
Vibrio cholera ATCC 11623	4.7×10^5	<2	>99.999	>5.40 Log_{10}
Xanthomonas axonopodis (Citrus Canker) ATCC 49118	1.28×10^6	3.6×10^1	>99.99	4.55 Log_{10}
Yersinia enterocolitica ATCC 23715	2.23×10^6	3.8×10^1	99.99	4.77 Log_{10}