OSM inc.
Natural Solutions for a Natural World

# Non Alcohol
# Hand Sanitizers

114 Broadway • Raynham, MA • 02767
1-888-473-6489

1.7 oz & 8 oz foaming pump bottles • 100 ct wipes

## INFORMATIONAL DATA SHEET

**Dragonfly Organix Hand Sanitizer** is alcohol and fragrance free, non-flammable and non-toxic. Effective protection anywhere germs or irritants are found.

**Dragonfly Organix Hand Sanitizer** is a unique, patented, FDA compliant skin antiseptic 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, it can be used to provide protection where sinks are not readily available or in-between regular hand washings.

**Dragonfly Organix Hand Sanitizer** protects against self and/or cross contamination of bacteria. It significantly reduces bacterial pathogens that cause disease on contact. One dime sized amount of Dragonfly Organix 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 Dragonfly Organix Hand Sanitizer. Implementing this product 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, Dragonfly Organix Hand Sanitizer moisturizes and improves the skin with continued use.

### 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.


### APPLICATIONS

Doctors Offices
Hospitals & Clinics
Traveling Nurses
Hospice
Nursing Homes
Veterinary Offices & Clinics
Laboratories
Day Care Centers
Preschools, K-12
Colleges & Universities
Fitness Centers, Gyms & Spas
Restrooms

### COMPARISON CHART — DRAGONFLY ORGANIX HAND SANITIZER VS. ISOPROPYL ALCOHOL

| Dragonfly Organix 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 |

### *WHAT DOES THIS MEAN TO YOU...*

- Once alcohol gel dries, you are no longer protected from germs because there is NO persistent anti-microbial 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 create a fire hazard in areas where an ignition source is present.
- IPA and Ethanol are toxic if ingested. Alcohol gels should be kept out of the reach of children. If consumed by children or adults, they 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. Dragonfly Organix Hand Sanitizer moisturizes and conditions your skin and helps to heal damaged skin with regular use.
- Dragonfly Organix Hand Sanitizer is fragrance free and doesn't contain any fragrance oils associated with allergic reactions

# Dragonfly Organix Foaming Hand Sanitizer

**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 | $1.02 \times 10^7$ | $<1 \times 10^2$ | >99.999 | >5.00 $Log_{10}$ |
| *Candida albicans* ATCC 10231 | $1.60 \times 10^5$ | $6.0 \times 10^3$ | 96.3 | 1.42 $Log_{10}$ |
| *Clostridium difficile* ATCC 9689 | $3.40 \times 10^6$ | <2 | >99.9999 | >6.20 $Log_{10}$ |
| *Enterococcus faecalis* Vancomycin Resistant (VRE) ATCC 51575 | $1.12 \times 10^6$ | $3.2 \times 10^1$ | 99.99 | 4.54 $Log_{10}$ |
| *Escherichia coli* ATCC 11229 | $3.50 \times 10^6$ | 4 | 99.999 | 6.00 $Log_{10}$ |
| *Escherichia coli* O157:H7 ATCC 35150 | $1.26 \times 10^6$ | <2 | >99.999 | >5.80 $Log_{10}$ |
| *Klebsiella pneumoniae* ATCC 4352 | $1.10 \times 10^6$ | 2 | 99.999 | 5.70 $Log_{10}$ |
| *Listeria monocytogenes* ATCC 19117 | $4.7 \times 10^6$ | $1.9 \times 10^5$ | 95.9 | 3.39 $Log_{10}$ |
| *Pseudomonas aeruginosa* ATCC 15442 | $3.5 \times 10^6$ | <2 | 99.9999 | >6.20 $Log_{10}$ |
| *Salmonella choleraesuis* serotype enteritidis ATCC 4931 | $6.8 \times 10^5$ | 2 | >99.999 | 5.50 $Log_{10}$ |
| *Salmonella choleraesuis* serotype paratyphi ATCC 8759 | $5.6 \times 10^5$ | <2 | >99.999 | >5.50 $Log_{10}$ |
| *Salmonella choleraesuis* serotype pullorum ATCC 19945 | $8.9 \times 10^5$ | <2 | >99.999 | >5.70 $Log_{10}$ |
| *Salmonella choleraesuis* serotype typhimurium ATCC 23564 | $7.7 \times 10^5$ | 6 | >99.999 | >5.10 $Log_{10}$ |
| *Salmonella typhi* ATCC 6539 | $1.27 \times 10^6$ | 2 | 99.999 | 5.80 $Log_{10}$ |
| *Shigella dysenteriae* ATCC 13313 | $1.3 \times 10^6$ | <2 | >99.999 | >5.80 $Log_{10}$ |
| *Shigella flexneri* ATCC 12022 | $1.39 \times 10^6$ | $2.8 \times 10^1$ | 99.99 | 4.69 $Log_{10}$ |
| *Shigella sonnei* ATCC 25931 | $2.43 \times 10^7$ | $2.0 \times 10^3$ | 99.9999 | 6.09 $Log_{10}$ |
| *Staphylococcus aureus* ATCC 6538 | $6.7 \times 10^6$ | <2 | >99.9999 | >6.53 $Log_{10}$ |
| *Staphylococcus aureus* Methicillin Resistant (MRSA) ATCC 33592 | $1.23 \times 10^7$ | $3.8 \times 10^3$ | >99.9 | 3.51 $Log_{10}$ |
| *Staphylococcus aureus* Community Associated Methicillin Resistant (MRSA) NARSA NRS 123, Genotype USA400 | $1.16 \times 10^6$ | $5.8 \times 10^2$ | >99.9 | >3.30 $Log_{10}$ |
| *Staphylococcus epidermidis* ATCC 12228 | $7.2 \times 10^5$ | <2 | 99.999 | 5.56 $Log_{10}$ |
| *Streptococcus pneumonia* ATCC 6305 | $6.4 \times 10^5$ | <2 | >99.999 | >5.51 $Log_{10}$ |
| *Streptococcus pyogenes* ATCC 19615 | $1.77 \times 10^6$ | <2 | >99.999 | >5.90 $Log_{10}$ |
| *Vibrio cholera* ATCC 11623 | $4.7 \times 10^5$ | <2 | >99.999 | >5.40 $Log_{10}$ |
| *Xanthomonas exonopodis* (Citrus Canker) ATCC 49118 | $1.28 \times 10^6$ | $3.6 \times 10^3$ | >99.99 | 4.55 $Log_{10}$ |
| *Yersinia enterocolitica* ATCC 23715 | $2.23 \times 10^5$ | $3.8 \times 10^1$ | 99.99 | 4.77 $Log_{10}$ |

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