



50 ml pump

- ⇒ **PROVEN TO KILL HUMAN CORONAVIRUS**  
(resembles the SARS-like virus family)
- ⇒ **EFFECTIVE IN KILLING C. DIFFICILE BACTERIA**
- ⇒ **WILL NOT REMOVE FINGERNAIL POLISH**
- ⇒ **NON DRYING**
- ⇒ **NON-FLAMMABLE**
- ⇒ **INCREASED USE COMPLIANCE**
- ⇒ **Each application requires 65% less volume than alcohol gels**

**NO RINSE**  
**ALCOHOL FREE**  
**HAND**  
**SANITIZER**  
*Patent Pending*

## **ANTI-MICROBE**

DIN#02248351

Approved by Health Canada and Agriculture Canada



1.5 L wall-mounted pump

	<b>ALCOHOL-BASED HAND SANITIZING GEL</b>	<b>ANTI-MICROBE NO-RINSE ALCOHOL-FREE ANTIBACTERIAL FOAMING HAND SANITIZER</b>
<b>SANITIZING INGREDIENT</b>	70% Ethyl Alcohol	Benzalkonium chloride
<b>%COMMON BACTERIA KILLED IN 30 SECONDS</b>	99.9	99.9
<b>DRYING TIME</b>	Instantly when rubbed in	Soon after being rubbed in
<b>FLAMMABILITY RATING</b>	4	0
<b>HAZARDOUS MATERIAL</b>	Yes <b>FLAMMABLE</b>	No
<b>POSSIBLE IRRITATION TO HANDS</b>	<ul style="list-style-type: none"> <li>➢ Drying to skin from repeated use or use during cold whether</li> <li>➢ May irritates cuts and abrasions</li> <li>➢ Removes nail polish</li> </ul>	Excessive use may cause temporary dryness
<b>AMMOUNT / APPLICATION</b>	1.5 ml	0.4 ml
<b>PRODUCT FORM</b>	Gel	Foam
<b>MAINTENANCE HAZARDS</b>	➢ Alcohol may harm floor finish	None

**Efficacy Data: Published by NO RINSE LABORATORIES (Ohio, USA)**



**The efficiency of No Rinse Foaming Hand sanitizer with  
0.24% Alkyl Dimethyl Benzyl Ammonium Chloride (Benzalkonium chloride)**

**In-Vitro Antimicrobial Test Procedures and Protocols:**

1. Each test organism was grown overnight on Trypticase-soy agar slants at 35°C. Cell suspensions were prepared by adding 10-ml sterile saline (0.9%) to each slant and gently scraping the slant surface. Microbial densities of each cell suspension were estimated using the viable plate count method.

2. Test product (1-ml) was aseptically added to sterile test tubes and then inoculated with a 1:10 dilution of a cell suspension (100uL) of the test organism. At selected time intervals (0.5, 1.0 and 2.0 minutes), aliquots (10uL) were aseptically removed and transferred to a Trypticase-soy broth recovery medium (10-ml). Microbial growth was monitored by the development of turbidity in the recovery medium

**TEST Results:**

The active Quaternary Ammonium Chloride exhibited strong germicidal activity against a variety of gram-positive and gram-negative, as well as the yeast *Candida albicans*. In most cases viable cell numbers were reduced by greater than 99.99% after a 30 second exposure period with this product.

Test Microorganisms	Initial Inoculum (cfu/10uL)	Exposure Time (Minutes)			Reduction (percent)*
		0.5	1.0	2.0	
Pseudomonas aeruginosa	3.39 x 10 <sup>5</sup>	-	-	-	99.99
Klebsiella pneumonia	2.76 x 10 <sup>5</sup>	-	-	-	99.99
Escheria coli	15.8 x 10 <sup>5</sup>	-	-	-	99.99
Salmonella typhimurium	18.9 x 10 <sup>5</sup>	-	-	-	99.99
Staphylococcus aureus ATCC33591	21.2 x 10 <sup>5</sup>	-	-	-	99.99
Staphylococcus Epidermidis	18.3 x 10 <sup>5</sup>	-	-	-	99.99
Streptococcus faecalis – ATCC522A	9.8 x 10 <sup>5</sup>	-	-	-	99.99
Streptococcus agalactae	12.1 x 10 <sup>5</sup>	-	-	-	99.99
Micrococcus luteus	14.4 x 10 <sup>5</sup>	-	-	-	99.99
Candida Albicans	12.6 x 10 <sup>5</sup>	-	-	-	99.99
Trichophyten	9.6 x 10 <sup>5</sup>	-	-	-	99.99
Mentogrophytes (Athlete's Foot)	-	-	-	-	99.99
Salmonella Chlorocraesuis	14.1 x 10 <sup>5</sup>	-	-	-	99.99
Aspergillus Niger	11.8 x 10 <sup>5</sup>	-	-	-	99.99
<b>Listeria Monocytogenes</b>	17.9 x 10 <sup>5</sup>	0 CFU/ML (30 seconds)			
<b>Clostridium difficile</b>	1.1 x 10 <sup>5</sup>	0 CFU/ML (15 seconds)			
<b>Human Coronavirus (Resembles SARS-like virus family)</b>		0 CFU/ML (15 seconds)			

(\* ) Indicates percentage reduction in numbers of viable cells evidenced by lack of growth in Trypticase-soy broth medium. (-) Indicates no survival of test organisms in the recover medium.

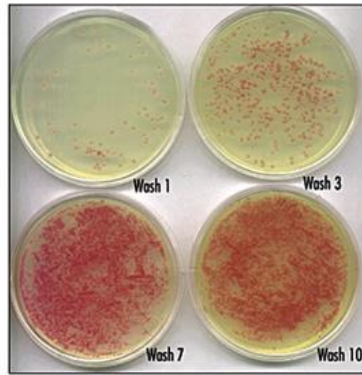
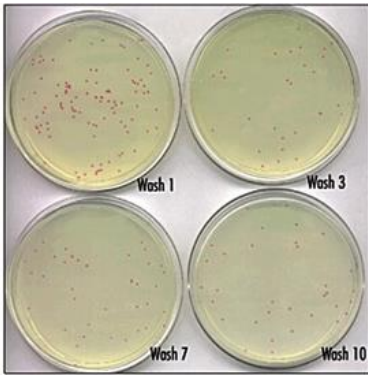
This study is performed by NO RINSSE LABORATORIES, LLC. 900 E: Franklin Street, Centerville, Ohio 45459 USA

**COMPARATIVE ANALYSIS BETWEEN**



## **ALCOHOL BASED HAND SANITIZER & BENZALKONIUM CHLORIDE FOAMING HAND SANITIZER**

Woodward Laboratories compared alcohol-based gels with HandClens (Benzalkonium chloride based foaming hand sanitizer). HandClens has been the subject of four scientific investigations. Two addressed the products efficacy against the Federal Guidelines for antiseptic hand washes and healthcare personnel hand washes. The results of these studies are represented by the charts below. With repeated use of alcohol-based sanitizers germ-killing effectiveness (antimicrobial persistence of activity) is reduced by the drying effect of alcohol which leaves microscopic cracks in the skin that can allow bacteria to become trapped or hidden.



**Benzalkonium Chloride based sanitizer**  
FDA testing protocol listed in Federal Register, Vol 59 (116), June 17, 1994, 21 CFR 333.470. "Effectiveness testing of an antiseptic Handwash or healthcarepersonnel Handwash."

**Alcohol based sanitizer**  
FDA testing protocol listed in Federal Register, Vol 59 (116), June 17, 1994, 21 CFR 333.470. "Effectiveness testing of an antiseptic Handwash or healthcarepersonnel Handwash."

**Alcohol-based gels fall below FDA minimum requirements after the 3rd round of hand washing.**

**HandClens is 99.99% effective against the most frequent disease and illness causing germs.**

### **Woodward's HandClens Kill Time Study**

The following are just some of the pathogens killed within 15 seconds of exposure to HandClens.

- |                              |                                     |
|------------------------------|-------------------------------------|
| Candida albicans             | Candida keyfr                       |
| Escherichia coli             | Enterococcus faecalis               |
| Enterococcus faecium (VRE)   | Klebsiella pneumonia                |
| Micrococcus luteus           | Pseudomonas aeruginosa              |
| Proteus mirabilis            | Salmonella typhimurium              |
| Serratia marcescens          | Staphylococcus aureus               |
| Staphylococcus aureus (MRSA) | Salmonella enteritidis              |
| Staphylococcus epidermidis   | Staphylococcus haemolyticus         |
| Staphylococcus saprophyticus | Streptococcus pyogenes              |
| Herpes simplex virus Type 1  | Human Coronavirus (related to SARS) |
| Trichophyton mentagrophytes  | Trichophyton rubrum                 |
| Apergillus niger             | Hepatitis A and B                   |

In vitro tests performed by SCI Laboratories, Inc.; revised protocol of CFR 333.470, Woodward Laboratories, Inc.; revised protocol of CFR 333.470, Viomed Laboratories, Inc.; revised protocol of ASTM E1052, and ATS Laboratories, Inc.; protocol of WLI01041603.COR