



Homecare de México S.A. de C.V.
Av. San Sebastián # 100 Col. Los Lermas
Guadalupe, N.L. CP 67188

EFFICACY DATA for



VIRUCIDAL DATA:

Test Methods:

- Protocols for Testing the Efficacy of Disinfectants against Hepatitis B Virus (HBV) (EPA, Federal Register, Vol. 65, No. 166, 8/25/2000, p. 51828).
Protocol for Testing Disinfectants against Hepatitis C Virus using Bovine Viral Diarrhea Virus as approved by the U.S. EPA on August 15, 2002.
U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, 1982, Section 91-30, pp. 72-76.
Virucide Assay (EPA, Federal Register 10, No. 123, 6/25/75, p. 26836)

Test Conditions: 3.5 ounces/5 gallons dilution, 10 minute contact time, glass petri dish substrates, 18.5-25°C exposure temperature, tested in the presence of serum

Results:

Table with 4 columns: Test Organism, Sample (A, B), and Titer Reduction (two columns). Rows include Adenovirus Type 5, Avian Influenza A/Turkey/Wisconsin, Bovine Viral Diarrhea Virus, Hepatitis B Virus, Hepatitis C Virus, Herpes Simplex Type 1, Human Coronavirus, Human Immunodeficiency Virus, Influenza A2, Laryngotracheitis, Newcastle Disease Virus, Porcine Respiratory & Reproductive Syndrome Virus, SARS associated Coronavirus, and Vaccinia.

Conclusion: Under the conditions of this investigation, SWIPOL was virucidal for Adenovirus Type 5, Avian Influenza A/Turkey/Wisconsin, Bovine Viral Diarrhea Virus (BVDV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Type 1 (Sabin), Human Coronavirus, Human Immunodeficiency Virus (HIV-1), Influenza A2 (Japan 305/57), Laryngotracheitis, Newcastle Disease Virus, Porcine Respiratory & Reproductive Syndrome Virus (PRRSV), SARS associated Coronavirus and Vaccinia (Wyeth) according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.



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DISINFECTION DATA:

Test Method: AOAC Use Dilution

Test Conditions: 5% organic soil load, 10 minute contact time, stainless steel carrier substrates  
 20°C exposure temperature

Results:

<u>Test Organism</u>	<u>Dilution</u>	<u>Sample</u>	<u>No. of Carriers</u>	
			<u>Exposed</u>	<u>Positive</u>
Staphylococcus aureus (ATCC 6538)	3 ounces/5 gallons	A	60	0
		B	60	0
Salmonella enterica (ATCC 10708)	3 ounces/5 gallons	A	60	0
		B	60	0
Listeria monocytogenes (ATCC 35152)	3 ounces/5 gallons	A	10	0
		B	10	0
Yersinia enterocolitica (ATCC 23715)	3 ounces/5 gallons	A	10	0
		B	10	0
Pseudomonas aeruginosa (ATCC 15442)	3.5 ounces/5 gallons	A	60	0
		B	60	0
Staphylococcus aureus (Vancomycin intermediate resistant) (VISA) (HIP-5836)	3.5 ounces/5 gallons	A	10	0
		B	10	0
Xanthomonas axonopodis (pathovar citri) (Citrus Canker) (USDA Permit No. 46190)	2.67 ounces/1 gallon	A	10	0
		B	10	0

**Conclusion:**

Under the conditions of these investigations, **SWIPOL** demonstrated **disinfectant** activity against Staphylococcus aureus, Salmonella enterica, Listeria monocytogenes, Yersinia enterocolitica, Pseudomonas aeruginosa, Staphylococcus aureus (Vancomycin intermediate resistant) (VISA), and Xanthomonas axonopodis pathovar citri (citrus canker) according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a bactericide.



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**SANITIZATION DATA (Food Contact Surfaces):**

**Test Method:** AOAC Germicidal and Detergent Sanitizing Action of Disinfectants

**Test Conditions:** synthetic hard water as **650 ppm** hardness (as CaCO<sub>3</sub>)  
**200 ppm active quaternary** (public eating establishments and dairies)  
**200-400 ppm active quaternary** (food processing equipment/utensils)  
 1-2 ounces/4 gallon dilution

Organism	Sample	TOTAL BACTERIAL COUNTS/ % KILL vs. EXPOSURE TIME				Initial Inoculum Control Count
		30 seconds		60 seconds		
		TBC*	% Kill†	TBC*	% Kill†	
<i>Staphylococcus aureus</i> (ATCC 6538)	A	970	99.999	105	99.999	7.8 x 10 <sup>7</sup>
	B	1285	99.999	205	99.999	9.2 x 10 <sup>7</sup>
	C	1145	99.999	130	99.999	9.3 x 10 <sup>7</sup>
<i>Escherichia coli</i> (ATCC 11229)	A	1125	99.999	50	99.999	1.0 x 10 <sup>8</sup>
	B	1075	99.999	95	99.999	9.3 x 10 <sup>7</sup>
	C	835	99.999	75	99.999	8.1 x 10 <sup>7</sup>
<i>Campylobacter jejuni</i> (ATCC 29428)	A	790	99.999	410	99.999	8.6 x 10 <sup>7</sup>
	B	780	99.999	470	99.999	8.6 x 10 <sup>7</sup>
<i>Escherichia coli</i> O157:H7 (ATCC 43895)	A	1220	99.999	110	99.999	9.2 x 10 <sup>7</sup>
	B	1000	99.999	125	99.999	9.2 x 10 <sup>7</sup>
<i>Listeria monocytogenes</i> (ATCC 35152)	A	<10	>99.999	<10	>99.999	7.8 x 10 <sup>8</sup>
	B	<10	>99.999	<10	>99.999	7.8 x 10 <sup>8</sup>
Methicillin resistant <i>Staphylococcus aureus</i> (ATCC 33592)	A	950	99.999	<10	>99.999	1.0 x 10 <sup>8</sup>
	B	970	99.999	<10	>99.999	1.0 x 10 <sup>8</sup>
<i>Salmonella typhi</i> (ATCC 6539)	A	<10	>99.999	<10	>99.999	1.4 x 10 <sup>8</sup>
	B	<10	>99.999	<10	>99.999	1.4 x 10 <sup>8</sup>
<i>Shigella sonnei</i> (ATCC 11060)	A	680	99.999	<10	>99.999	9.3 x 10 <sup>7</sup>
	B	4500	99.999	<10	>99.999	9.3 x 10 <sup>7</sup>
Vancomycin resistant <i>Enterococcus faecalis</i> (ATCC 51299)	A	<10	>99.999	<10	>99.999	1.2 x 10 <sup>8</sup>
	B	<10	>99.999	<10	>99.999	1.2 x 10 <sup>8</sup>
<i>Vibrio cholera</i> (ATCC 14035)	A	<10	>99.999	<10	>99.999	8.3 x 10 <sup>7</sup>
	B	<10	>99.999	<10	>99.999	8.3 x 10 <sup>7</sup>
<i>Yersinia enterocolitica</i> (ATCC 23715)	A	108	99.999	<10	>99.999	1.7 x 10 <sup>8</sup>
	B	1300	99.999	263	99.999	5.9 x 10 <sup>8</sup>

\*TBC = Total Bacterial Count, organisms/ml

† = % Kill calculation based on Initial Inoculum Control Count.

**Conclusion:** Under the conditions of these investigations, **SWIPOL** demonstrated **sanitizing** activity against *Staphylococcus aureus*, *Escherichia coli*, *Campylobacter jejuni*, *Escherichia coli* O157:H7, *Listeria monocytogenes*, Methicillin resistant *Staphylococcus aureus*, *Salmonella typhi*, *Shigella sonnei*, Vancomycin resistant *Enterococcus faecalis*, *Vibrio cholera* and *Yersinia enterocolitica* according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a sanitizer.

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**SANITIZATION DATA (Food Contact Surfaces) (continued):**

**Test Method:** AOAC Germicidal and Detergent Sanitizing Action of Disinfectants  
**Test Conditions:** synthetic hard water as **650 ppm** hardness (as CaCO<sub>3</sub>)  
**300-400 ppm active quaternary** (food processing equipment/utensils ONLY)  
 1.5-2.0 ounces/4 gallon dilution

**Results:**

<u>Organism</u>	<u>Sample</u>	TOTAL BACTERIAL COUNTS/ % KILL vs. EXPOSURE TIME				Initial Inoculum <u>Control Count</u>
		<u>30 seconds</u>		<u>60 seconds</u>		
		<u>TBC*</u>	<u>% Kill†</u>	<u>TBC*</u>	<u>% Kill†</u>	
<i>Klebsiella pneumoniae</i> (ATCC 4352)	A	100	99.999	<10	>99.999	9.4 x 10 <sup>8</sup>
	B	310	99.999	<10	>99.999	9.4 x 10 <sup>8</sup>

\*TBC = Total Bacterial Count, organisms/ml  
 † = % Kill calculation based on Initial Inoculum Control Count.

**Conclusion:** Under the conditions of these investigations, **SWIPOL** demonstrated **sanitizing** activity against *Klebsiella pneumoniae* at 300 ppm quaternary concentration and 650 ppm water hardness according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a sanitizer.

**Test Method:** AOAC Germicidal and Detergent Sanitizing Action of Disinfectants  
**Test Conditions:** synthetic hard water as **500 ppm** hardness (as CaCO<sub>3</sub>)  
**200 ppm active quaternary** (public eating establishments, dairies, and food processing equipment/utensils)  
 1 ounce/4 gallon dilution

**Results:**

<u>Organism</u>	<u>Sample</u>	TOTAL BACTERIAL COUNTS/ % KILL vs. EXPOSURE TIME				Initial Inoculum <u>Control Count</u>
		<u>30 seconds</u>		<u>60 seconds</u>		
		<u>TBC*</u>	<u>% Kill†</u>	<u>TBC*</u>	<u>% Kill†</u>	
<i>Klebsiella pneumoniae</i> (ATCC 4352)	A	340	99.999	<10	>99.999	1.1 x 10 <sup>8</sup>
	B	190	99.999	<10	>99.999	1.1 x 10 <sup>8</sup>

\*TBC = Total Bacterial Count, organisms/ml  
 † = % Kill calculation based on Initial Inoculum Control Count.

**Conclusion:** Under the conditions of these investigations, **SWIPOL** demonstrated **sanitizing** activity against *Klebsiella pneumoniae* at 200 ppm quaternary concentration and 500 ppm water hardness according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a sanitizer.



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**SANITIZATION DATA (Non-Food Contact Surfaces):**

**Test Method:** Sanitizer Test for Inanimate, Non-Food Contact Surfaces

**Test Conditions:** 1 ounce/4 gallon dilution, 30 second contact time, 5% organic soil load, room temperature, synthetic hard water as 200 ppm hardness (as CaCO<sub>3</sub>), 1 square inch glass slide carriers

<u>Test Organism</u>	<u>Sample</u>	<u>Averaged Carrier Control Count (CFU*/carrier)</u>	<u>Averaged Test Substance Carrier Count Following 30 second Exposure (CFU*/carrier)</u>	<u>% Reduction</u>
<i>Klebsiella pneumoniae</i> (ATCC 4352)	A	720,000	<20	>99.9
	B	720,000	<20	>99.9
	C	720,000	<20	>99.9
<i>Staphylococcus aureus</i> (ATCC 6538)	A	720,000	<20	>99.9
	B	720,000	<20	>99.9
	C	720,000	<20	>99.9
<i>Listeria monocytogenes</i> (ATCC 35152)	A	720,000	<20	>99.9
	B	720,000	<20	>99.9
	C	720,000	<20	>99.9

\*CFU = Colony Forming Units

**Conclusion:** Under the conditions of these investigations, **SWIPOL** demonstrated **sanitizing** activity on non-food contact surfaces against *Klebsiella pneumoniae*, *Staphylococcus aureus* and *Listeria monocytogenes* according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a sanitizer.