



Quat-Shot

Cleaner - Deodorizer - Disinfectant
Mildewstat (on hard, inanimate surfaces)
*Virucide (see panel for more information)
Fungicide (against Pathogenic fungi)

DESCRIPTION

Quat-Shot is designed specifically as a general non-acid cleaner and disinfectant for use in homes, hospitals, nursing homes, schools, hotels and restaurants as well as for use in industrial and institutional food processing establishments, kennels, veterinarian and animal hospitals. **Quat-Shot** is formulated to disinfect hard non-porous, inanimate surfaces such as floors, walls, metal surfaces, stainless steel, porcelain, glazed ceramic tiles, plastic surfaces, bathrooms, shower stalls, bathtubs and cabinets. For plastic and painted surfaces, spot test on an inconspicuous area before use. A rinse with potable water is required for surfaces in direct contact with food. **Quat-Shot** deodorizes those areas which generally are hard to keep fresh smelling, such as garbage storage areas, empty garbage bins and cans, basements, restrooms and other areas which are prone to odors caused by microorganisms.

SPECIAL INFORMATION

Canadian DIN #: 02243546

Guarantee

n-Alkyl (60% C ₁₄ , 30% C ₁₆ , 5% C ₁₂ , 5% C ₁₈) dimethyl benzyl ammonium chlorides	0.105%
n-Alkyl (68% C ₁₂ , 32% C ₁₄) dimethyl ethyl benzyl ammonium chlorides	0.105%

DIRECTIONS

Disinfection, Deodorizing and Cleaning:

Remove gross filth or heavy soil prior to application of **Quat-Shot**. Hold container 15 to 20 cm from surface to be treated. Spray area until it is covered with the solution. Allow **Quat-Shot** to penetrate and remain wet for 10 minutes. No scrubbing is necessary. Wipe off with a clean cloth, mop or sponge. **Quat-Shot** will not leave grit or soap scum.

To disinfect food processing premises and food contact surfaces:

For floors, countertops, appliances, tables, walls and storage areas, hold container 15 to 20 cm from the surface to be treated and spray area until it is covered with the solution. Allow **Quat-Shot** to penetrate and remain wet for 10 minutes. Wipe off with a clean cloth, mop or sponge and thoroughly rinse all surfaces in the area with potable water. Heavily soiled areas must be pre-cleaned before using this product. Food products and packaging materials must be removed or carefully protected prior to using this product. Do not use on eating utensils, glassware and cookware.

One-step cleaning and disinfection of toilet bowls and urinals:

Remove water from bowl by forcing water over trap with a swab mop applicator. Press swab mop against side of the bowl to remove excess water from applicator. Apply 30 to 60 mL of **Quat-Shot** evenly, allowing sufficient time for product to cover entire surface of bowl for maximum cleaning. Swab bowl completely using a scrub brush or toilet mop, making sure to get under the rim. Let stand 10 minutes and flush.



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Mildewstat:

To control mold and mildew on pre-cleaned, hard, nonporous surfaces, spray surface to be treated making sure to wet completely. Let air dry. Repeat **Quat-Shot** application at weekly intervals or when mildew growth appears.

Quat-Shot KILLS HIV-1 ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS in health care settings (Hospitals, Nursing Homes) or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential transmission of Human Immunodeficiency Virus Type 1 (HIV-1).

Special Instructions for Cleaning and Decontamination against HIV-1 on Surfaces/Objects Soiled with Blood or Body Fluids:

Personal Protection: When handling items soiled with blood or body fluids, use disposable latex gloves, gowns, masks, or eye coverings.

Cleaning Procedures: Blood or body fluids must be thoroughly cleaned from surfaces and objects before application of this product.

Contact Time/Dilution: Apply **Quat-Shot** directly and allow surface to remain wet for 10 minutes.

Disposal of Infectious Materials: Blood or other body fluids should be autoclaved and disposed of according to local regulations for infectious waste disposal.

Efficacy tests have demonstrated that this product is an effective Bactericide, Fungicide and Virucide in the presence of organic soil (5% blood serum).

EFFICACY DATA

DISINFECTION DATA:

Test Method: AOAC Germicidal Spray Products as Disinfectants

Test Conditions: Ready to use (RTU), organic soil load, room temperature, glass slide carrier substrates

Results:

<u>Test Organism</u>	<u>Sample</u>	<u>Exposed</u>	<u>No. of Carriers</u>		<u>Contact Time</u>
			<u>Positive</u>		
<i>Staphylococcus aureus</i> (ATCC 6538)	A	60	0		3 minutes
	B	60	0		
<i>Salmonella (choleraesuis) enterica (ATCC 10708)</i>	A	60	0		3 minutes
	B	60	0		
<i>Pseudomonas aeruginosa</i> (ATCC 15442)	A	60	0		3 minutes
	B	60	0		
<i>Escherichia coli</i> (ATCC 11229)	A	10	0		3 minutes
	B	10	0		
<i>Enterococcus faecium</i> (ATCC 6569)	A	10	0		3 minutes
	B	10	0		

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DISINFECTION DATA continued:

Results: Test Organism	No. of Carriers		Positive	Contact Time
	Sample	Exposed		
Vancomycin Resistant	A	10	0	3 minutes
Enterococcus faecalis	B	10	0	
(VRE) (ATCC 51575)				
<i>Escherichia coli</i> 0157:H7(ATCC 43895) A&B		10	0	3 minutes
Methicillin resistant	A	10	0	3 minutes
Staphylococcus epidermidis	B	10	0	
(MRSE) (ATCC 51625)				
Community Associated Methicillin Resistant <i>Staphylococcus aureus</i> (CA-MRSA)(NRS 123) Genotype USA400	A	10	0	3 minutes
	B	10	0	
Streptococcus pyogenes	A	10	0	3 minutes
(Necrotizing Fasciitis-Group A)	B	10	0	
(V.A. Medical Center Isolate 04001)				
<i>Corynebacterium ammoniagenes</i> (ATCC 6871)	A	10	0	3 minutes
	B	10	0	
Staphylococcus aureus	A	10	0	3 minutes
(Vancomycin Intermediate Resistant (VISA) (HIP 5863)	B	10	0	
<i>Staphylococcus aureus</i> (Methicillin Resistant)(MRSA) (ATCC 33593)	A	10	0	3 minutes
	B	10	0	
Listeria monocytogenes	A	10	0	3 minutes
(ATCC 35152)	B	10	0	
<i>Salmonella (typhi) enterica</i> (ATCC 6539)	A	10	0	3 minutes
Yersinia enterocolitica	A	10	0	3 minutes
(ATCC 23715)	B	10	0	
<i>Klebsiella pneumoniae</i> New Delhi Metallo-Beta Lactamase (NDM-1) Carbapenem Resistant	A	10	0	3 minutes
	B	10	0	

Conclusion:

Under the conditions of this investigation, **Quat-Shot**, was bactericidal for *Staphylococcus aureus*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*, *Enterococcus faecalis* (Vancomycin Resistant)(VRE), *Escherichia coli* 0157:H7, *Escherichia coli*, *Staphylococcus aureus* (Methicillin Resistant) (MRSA), *Streptococcus pyogenes* (Necrotizing Fasciitis-Group A), *Staphylococcus epidermidis* (Methicillin Resistant) (MRSE), *Corynebacterium ammoniagenes*, *Enterococcus faecium*, *Listeria monocytogenes*, *Salmonella (typhi) enterica*, Community Associated Methicillin Resistant *Staphylococcus aureus* (CA-MRSA), *Yersinia enterocolitica*, *Staphylococcus aureus* (Vancomycin Intermediate Resistant) (VISA), and *Klebsiella pneumoniae* New Delhi Metallo-Beta Lactamase (NDM-1) Carbapenem Resistant according to criteria established by Health Canada for registration and labeling of a disinfectant product as a bactericide.



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FUNGICIDAL DATA:

Test Method: AOAC Germicidal Spray Products as Disinfectants

Test Conditions: Ready to use (RTU), organic soil load, room temperature, glass slide carrier substrates

Results:

<u>Test Organism</u>	<u>Sample</u>	<u>No. of Carriers</u>		<u>Contact Time</u>
		<u>Exposed</u>	<u>Positive</u>	
<i>Trichophyton mentagrophytes</i> (ATCC 9533)	A&B&C	60	0	(10 minutes)

Conclusion:

Under the conditions of this investigation, **Quat-Shot**, was fungicidal for *Trichophyton mentagrophytes* according to criteria established by Health Canada for registration and labeling of a disinfectant product as a fungicide.

VIRUCIDAL DATA:

Test Methods: *U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Products Performance, Section 91-2 (f), and Section 91-30, (d), (e), November 1982.

**Modified U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2(f), and Section 91-3(d),(e),November, 1982.

***Protocol for Testing Disinfectants against Hepatitis C Virus using Bovine Viral Diarrhea Virus as approved by the U.S. EPA on August 15, 2002.

- Modified U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2(f), and Section 91-30 (d), (e), November, 1982.

Test Conditions: Ready to use (RTU), organic soil load, room temperature, glass petri dish substrates



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VIRUCIDAL DATA continued:

Results:

<u>Test Organism</u>	<u>Sample</u>	<u>Titer Reduction</u>	<u>Contact Time</u>
* Rabies Virus (attenuated ERA strain, CDC)	A&B	3.0 log	30 sec.
*** Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus-BVDV)	A&B	>/= 3.0 log	5 min.
*** Bovine Viral Diarrhea Virus (BVDV)	A&B	>/= 3.0 log	5 min.
* Rhinovirus Type 39 (ATCC VR-340)	A&B	>/= 3.0 log	3 min.
* Rotovirus	A&B	>/= 3.0 log	3 min.
* SARS Associated Coronavirus (ZeptoMetrix)	A&B	4.03 log	2 min.
* Poliovirus Type 1, strain Brunhilde (ATCC VR-1000)	A&B	>/= 3.25 log	10 min.
* Human Immunodeficiency Virus, HTLV-III _{RF} , strain of HIV-1 (associated with AIDS)	A&B	>/= 3.5 log	1 min.
* Canine Parvovirus (ATCC VR-2017)	A&B	>/= 3.0 log	10 min.
- Norovirus (Norwalk Virus)	A&B	6.48 log	30 sec.
* Avian Influenza A Virus (H3N2) (Avian Reassortant) (ATCC VR-2072)	A&B	>/= 3.0 log	2 min.
* Avian Influenza Virus, Type A (Turkey/WIS/66) (H9N2)	A&B	>/= 4.83 log	2 min.
* Hepatitis A Virus (HAV)	A&B	>/= 3.0 log	10 min.
* Human Coronavirus (ATCC VR-740, strain 229E)	A&B	>/= 3.0 log	2 min.
* Paramyxovirus (Mumps) (ATCC VR-1438)	A&B	>/= 3.0 log	3 min.
- Feline Calicivirus (FCV)	A&B	6.48 log	30 sec.



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VIRUCIDAL DATA continued:

Conclusion:

Under the conditions of this investigation, **Quat-Shot** was virucidal for Hepatitis A Virus (HAV), Avian Influenza A Virus (H3N2), Avian Influenza Virus Type A (H9N2), Human Coronavirus, Rabies, Hepatitis C Virus (HCV), Poliovirus Type 1, Human Immunodeficiency Virus (HIV-1), Canine Parvovirus, Rhinovirus Type 39, Rotovirus, SARS Associated Coronavirus, Paramyxovirus (Mumps), Bovine Viral Diarrhea Virus (BVDV), Feline Calicivirus and Norwalk Virus according to criteria established by Health Canada for registration and labeling of a disinfectant product as a virucide.

TUBERCULOCIDAL DATA:

AOAC Confirmative In Vitro Test for Determining Tuberculocidal Activity

Test Organism: ***Mycobacterium bovis* BCG**

Test Conditions: **Ready to use (RTU), organic soil load, 5 minute contact time, glass slide carrier substrates**

Results:

<u>Subculture Media</u>	<u>Sample</u>	<u>No. of Carriers</u>	
		<u>No. of Exposed Carriers</u>	<u>Showing Growth</u>
modified Proskauer-Beck Medium	A	10	0
	B	10	0
Middlebrook 7H9 Broth	A	10	0
	B	10	0
Kirchners Medium	A	10	0
	B	10	0

Conclusion:

Under the conditions of this investigation, **Quat-Shot** was tuberculocidal for *Mycobacterium bovis* (BCG) according to criteria established by Health Canada for registration and labeling of a disinfectant product as a tuberculocide.



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MILDEW FUNGISTATIC DATA:

Test Method: EPA Hard Surface Mildew Fungistatic Test
Test Organism: *Aspergillus niger* (ATCC 6275)
Test Conditions: Glazed ceramic tile substrates

Results:

<u>Sample</u>	<u>No. of Exposed Tiles</u>	<u>No. of Tiles Showing Growth</u>
<i>Quat-Shot</i>	10	0
Control	10	10

Conclusion:

Under the conditions of this investigation, *Quat-Shot* was fungistatic for *Aspergillus niger* according to criteria established by Health Canada for registration and labeling of a disinfectant product as a fungistat.

FUNGICIDAL DATA:

Test Method: AOAC Germicidal Spray Products as Disinfectants
Test Conditions: Ready-to-use (RTU), organic soil load, room temperature, glass slide carrier substrates

Results:

<u>Test Organism:</u>	<u>Sample</u>	No. of Carriers		<u>Contact Time</u>
		<u>Exposed</u>	<u>Positive</u>	
<i>Trichophyton mentagrophytes</i> (ATCC 9533)	A	60	0	10 minutes
	B	60	0	
	C	60	0	

Conclusion:

Under the conditions of this investigation, *Quat-Shot* was fungicidal for *Trichophyton mentagrophytes* according to criteria established by Health Canada for registration and labeling of a disinfectant product as a fungicide.

Quat-Shot has demonstrated effectiveness against Bovine Viral Diarrhea and Influenza A virus and is expected to inactivate all Influenza A viruses including 2009 (H1N1) pandemic Influenza A virus.

