RX75

Antibacterial Heavy Duty Cleaner and Odour Counteractant

Efficacy data

EPA Reg. No. 1839-83-44089

TUBERCULOCIDAL ACTIVITY

Test Method: AOAC Confirmative In Vitro Test for Determining Tuberculocidal Activity.
Test Organism: *Mycobacterium Bovis BCG* (Organon Teknika)
Test Conditions: RX75 RTU - organic soil load, 5 minute contact time - glass slide carrier substrates
Results:

Subculture Media	Sample	No. of Exposed Carriers	No. of Carriers Showing Growth
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 RX75 Antibacterial Heavy Duty Cleaner and Odour Counteractant was **tuberculocidal** for *Mycobacterium Bovis* BCG according to criteria established by the U.S. Environmental Protection Agency for registration and labelling of a disinfectant product as a tuberculocide.

MILDEW FUNGISTATIC ACTIVITY

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

Sample	No. of Exposed Tiles	No. of Tiles Showing Growth
RX75	10	0
CONTROL	10	10

CONCLUSION: Under the conditions of this investigation, RX75 Antibacterial Heavy Duty Cleaner and Odour Counteractant was **fungistatic** for *Aspergillus niger* according to criteria established by the U.S. Environmental Protection Agency for registration and labelling of a disinfectant product as a fungistat.

FUNGICIDAL ACTIVITY

Test Method: AOAC Germicidal Spray Products as Disinfectants
Test Conditions: RX75 RTU - organic soil load - room temperature - glass slide carrier substrates
Results:

Organism	Sample	No. of Carriers Exposed	No. of Carriers Positive	Contact Time
Trichophyton mentagrophytes (ATCC 9533)	A	60	0	10 minutes
	B	60	0	
	C	60	0	

CONCLUSION: Under the conditions of this investigation, RX 75 Antibacterial Heavy Duty Cleaner and Odour Counteractant was **fungicidal** for *Trichophyton mentagrophytes* (Athlete's Food Fungus, a cause of ringworm) according to criteria established by the U.S. Environmental Protection Agency for registration and labelling of a disinfectant product as a fungicide.

RX75 (Continued) EPA Reg. No. 1839-83-44089

BACTERICIDAL ACTIVITY

Test Method: AOAC Germicidal Spray Products as Disinfectants
Test Conditions: RX75 RTU - organic soil load - room temperature - glass slide carrier substrates
Results:

Organism	Sample	No. of Carriers Exposed	Positive	Contact Time
Staphylococcus aureus (ATCC 6538)	A	60	0	3 minutes
	B	60	0	
Salmonella choleraesuis (ATCC 10708)	A	60	0	3 minutes
	B	60	0	
Pseuodomonas aeruginosa PRD-10 (ATCC 15442)	A	60	0	3 minutes
	B	60	0	
Corynebacterium ammoniagenes (ATCC 6871)	A	10	0	3 minutes
	B	10	0	
Enterococcus faecium (ATCC 6569)	A	10	0	3 minutes
	B	10	0	
Escherichia coli (ATCC 11229)	A	10	0	3 minutes
	B	10	0	
Escherichia coli 0157:H7 (ATCC 43895)	A	10	0	3 minutes
	B	10	0	
Listeria monocytogenes (ATCC 35152)	A	10	0	3 minutes
	B	10	0	
Salmonella typhi (ATCC 6839)	A	10	0	3 minutes
	B	10	0	
Yersinia enterocolitica (ATCC 23715)	A	10	0	3 minutes
	B	10	0	
Streptococcus pyogenes (Necroitizing Fasciitis-Group A) (VA Medical Center Isolate 04001)	A	10	0	3 minutes
	B	10	0	
Methicillin resistant *Staphylococcus aureus*(MRSA) (ATCC 33593)	A	10	0	3 minutes
	B	10	0	
Methicillin resistant *Staphylococcus epidermidis* (MRSE) (ATCC 51625)	A	10	0	3 minutes
	B	10	0	
Vancomycin resistant *Enterococcus faecalis* (VRE) (ATCC 51575)	A	10	0	3 minutes
	B	10	0	
Vancomycin intermediate resistant *Staphylococcus aureus* (VISA) (CDC Isolate 99287)	A	10	0	3 minutes
	B	10	0	

CONCLUSION: Under the conditions of this investigation, RX75 Antibacterial Heavy Duty Cleaner and Odour Counteractant was **bactericidal** for *Staphylococcus aureus, Salmonella choleraesuis, Pseudomonas aeruginosa,Corynebacterium ammoniagenes,Enterococcus faecium, Escherichia coli, Escherichia coli* 0157:H7*, Streptococcus pyogenes* (VA Medical Center Isolate 04001), *Listeria monocytogenes, Salmonella typhi,Yersinia enterocolitica,* Methicillin resistant *Staphylococcus aureus* (MRSA), Methicillin resistant *Staphylococcus epidermidis* (MRSE),Vancomycin resistant *Enterococcus faecalis* (VRE),Vancomycin intermediate resistant *Staphylococcus aureus* (VISA), *Streptococcus faecalis* according to criteria established by the U.S. Environmental Protection Agency for registrationand labeling of a disinfectant product as a bactericide.

VIRUCIDAL ACTIVITY

Test Method: *U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2(f), and Section 91-30 (d), (e), November. 1982.
†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 Diarrhoea 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: RX75 RTU - organic soil load - room temperature - glass petri dish substrates

Results:

Test Organism	Sample	Titer Reduction	Contact Time
‡Bovine Viral Diarrhoea Virus (BVDV)	A&B	≥3.0 $\log_{10}$	5 minutes
*Canine Parvovirus (ATCC VR-2017)	A&B	≥3.0 $\log_{10}$	10 minutes
•Feline Calicivirus (FCV)	A&B	6.48 $\log_{10}$	30 seconds
†Hepatitis A Virus (HAV)	A&B	≥3.0 $\log_{10}$	10 minutes
†Hepatitis B Virus (HBV) (Duck Hepatitis B Virus-DHBV)	A&B	≥3.3 $\log_{10}$	5 minutes
‡Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus-BVDV)	A&B	≥3.0 $\log_{10}$	5 minutes
*Human Immunodeficiency Virus, HTLV-IIIRF, strain of HIV-1 (associated with AIDS)	A&B	≥3.5 $\log_{10}$	1 minute
*Human Coronavirus (ATCC VR-740, strain 229E)	A&B	≥3.0 $\log_{10}$	2 minutes
*Norovirus (Norwalk Virus)	A&B	6.48 $\log_{10}$	30 seconds
*Poliovirus Type 1, strain Brunhilde (ATCC VR-1000)	A&B	≥3.25 $\log_{10}$	10 minutes
*Rabies Virus (attenuated ERA strain, CDC)	A&B	≥3.0 $\log_{10}$	30 seconds
*Rhinovirus Type 39 (ATCC VR-340)	A&B	≥3.0 $\log_{10}$	3 minutes
*Rotovirus	A&B	≥3.0 $\log_{10}$	3 minutes
*SARS Associated Coronavirus (ZeptoMetrix)	A&B	4.03 $\log_{10}$	2 minutes

CONCLUSION: Under the conditions of this investigation, RX75 Antibacterial Heavy Duty Cleaner and Odour Counteractant was **virucidal** for *Bovine Viral Diarrhea Virus* (BVDV), *Canine Parvovirus, Feline Calicivirus* (FCV), *Hepatitis A Virus* (HAV), *Hepatitis B Virus* (HBV), *Hepatitis C Virus* (HCV), *Human Immunodeficiency Virus* (HIV-1), *Human Coronavirus, Norovirus* (Norwalk Virus), *Poliovirus Type 1, Rabies Virus, Rhinovirus* Type 39, *Rotovirus,Avian Influenza A* and *SARS Associated Coronavirus* 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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