



Maintenance Solutions

SUMMARY OF ANTIMICROBIAL ACTIVITY

ANIMAL FACILITIES DISINFECTANT & CLEANER

Cleaner – Disinfectant – Virucide*

Description

Animal Facilities Disinfectant & Cleaner is a broad spectrum, moderate pH, hard surface disinfectant. When used as directed, this product will deliver effective biocidal action against bacteria, fungi, and viruses. This formulation is a blend of a premium active ingredients and inerts: surfactants, chelates, and water. Biocidal performance is attained when this product is properly diluted at 2 oz. per gallon or 1:64. **Animal Facilities Disinfectant & Cleaner** can be in Veterinary clinics, animal life science laboratories, animal research centers, animal quarantine areas, animal breeding facilities, animal holding areas, kennels, dog/cat animal kennels, breeding and grooming establishments, pet animal quarters, zoos, pet shops, tack shops, operating rooms, washing areas, waiting rooms, examination rooms, and other animal care facilities. This product can be used to disinfect, clean and deodorize terrarium and small animal cages, hot rock, substrate and cage furniture, plastic terrarium ornaments, driftwood, heat caves and water dishes.

Regulatory Summary

Physical Properties

EPA Registration No.	10324-59-8325
USDA Authorization	None
California Status	
Canadian PCP#	None
Canadian Din #	None

pH of Concentrate	11.5 ±0.2	Flash Point (PMCC)	>200°F
Specific Gravity @ 25°C	1.043	% Quat (mol. wt.360.5)	4.275-4.725
Pounds per gallon @ 25°C	8.7	% Volatile	93.5-94.5

Summary of Antimicrobial Test Results

Animal Facilities Disinfectant & Cleaner is a "One-Step" Disinfectant, Virucide, Fungicide, Mildewstat, and Cleaner. Listed below, and in the following pages, is a summary of the Antimicrobial Claims and a review of the Antimicrobial Test Results.

Claim: Disinfectant	Contact Time: 10 minutes	Organic Soil: 5%	Water Conditions: 400 ppm as CaCO ₃
Test Method: Official Method of the AOAC, 14 Edition Use Dilution Method			

Organism	ATCC#	Use-Dilution Concentration	Hard Water Condition	Contact Time	Results
Bordetella bronchiseptica		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/60, 0/60, 0/60
Campylobacter jejuni		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/60, 0/60, 0/60
Corynebacterium ammoniagenes		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/60, 0/60, 0/60
Enterobacter aerogenes	13048	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Enterococcus faecalis		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Escherichia coli	11229	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Klebsiella pneumoniae	13883	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Listeria monocytogenes	15313	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Pseudomonas aeruginosa	Clinical Isolate	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Salmonella enterica		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Salmonella Typhi	6539	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Salmonella schottmuelleri		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Shigella dysenteriae		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Staphylococcus aureus (MRSA)	33592	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Community associated Staphylococcus aureus (CA MRSA)	33592	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Staphylococcus aureus	Clinical Isolate	703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10
Streptococcus salivarius		703 ppm (2.0 oz/gal)	400 ppm	10 minutes	0/10, 0/10

Conclusion: All lots of **Animal Facilities Disinfectant & Cleaner** effectively killed the above listed bacteria as specified in the test performance standards. **Animal Facilities Disinfectant & Cleaner** meets EPA requirements for hard surface disinfectant claims in animal hospital and other environments when diluted to 703 ppm active concentration in 400 ppm synthetic hard water, and in the presence of 5% organic soil.

Summary of Antimicrobial Test Results - (Continued)

Claim: Mildewstat	Contact Time: 10 minutes	Organic Soil: 5%	Water Conditions: 400 ppm as CaCO ₃
Test Method: Mildewstat (Mold and Mildew Control) - EPA - TSD 6-201 Mildewstat on Hard Surfaces			

Organism	ATCC#	Use-Dilution Concentration	Hard Water Condition	Replicates	Results
Aspergillus niger	6275	703 ppm (2.0 oz/gal)	400 ppm	10, 10	0/10, 0/10

Conclusion: All lots of **Animal Facilities Disinfectant & Cleaner** were effective against *Aspergillus niger* under the test conditions outlined in the EPA test performance standards described above. **Animal Facilities Disinfectant & Cleaner** is an effective mildewstat for non-porous inanimate hard surfaces when diluted to 703 ppm active concentration in 400 ppm synthetic hard water and in the presence of 5% organic soil.

Claim: Fungicide	Contact Time: 10 minutes	Organic Soil: 5%	Water Conditions: 400 ppm as CaCO ₃
Test Method: Official Method of Analysis of the AOAC Fungicidal Test.			

Organism	ATCC#	Dilution	Replicate s	Results		
				5 Min	10 Min	15 Min
Trichophyton mentagrophytes	9533	703 ppm (2.0 oz/gal)	4	0/4 +	0	0

Conclusion: All lots of **Animal Facilities Disinfectant & Cleaner** effectively killed *Trichophyton mentagrophytes* as specified in the test performance standards. **Animal Facilities Disinfectant & Cleaner** is an effective fungicide for non-porous inanimate hard surfaces when diluted to 703 ppm active concentration in 400 ppm synthetic hard water and in the presence of 5% organic soil.

Summary of Antimicrobial Test Results - (Continued)

Claim: Virucide	Contact Time: Varies	Organic Soil: 5%	Water Conditions: 400 ppm as CaCO ₃
Test Method: EPA Guidelines			

Organism	Source of Virus or ATCC#	Host System; Cytopathic Effect	Use-Dilution Concentration	Contact Time
Herpes Simplex Type 1	HSV-1; ATCC VR-733	VERO cells; lytic cytopathic effect	703 ppm (2.0 oz./gal)	10 Min.
Herpes Simplex Type 2	HSV-2; MS Strain	VERO cells; lytic cytopathic effect	703 ppm (2.0 oz./gal)	10 Min.
HIV-1 (AIDS Virus)	HTLV-III _{RF} ; NCI	MT2 cells; lytic cytopathic effect	703 ppm (2.0 oz./gal)	4 Min.
Influenza A/ Hong Kong	ATCC 68-H3N2	MDCK cells; lytic cytopathic effect	703 ppm (2.0 oz./gal)	10 Min.
Hepatitis B	Hepadnavirus Testing, Inc. (DHBV)	Primary Duck Hepaocytes No Cytopathic Effects	703 ppm (2.0 oz./gal)	10 min.
Hepatitis C (HCV)	Bovine Viral Diarrhea Virus	MDBK Cells	703 ppm (2.0 oz./gal)	10 min.
Human Corona Virus	VR-740 Strain 229E	MRC-5 Host	703 ppm (2.0 oz./gal)	10 Min.
Norovirus (Norwalk-like virus) (feline calicivirus)	ATCC VR-782		703 ppm (2.0 oz./gal)	10 Min.
Influenza A2/Japan			703 ppm (2.0 oz./gal)	10 Min.
Rubella virus	Strain M-33	RK13 cells; cytopathic effect	703 ppm (2.0 oz./gal)	10 Min.
Rabies virus	ATCC VR-138		1055 ppm (2.5 oz./gal)	10 Min.
Respiratory Syncytial virus	ATCC VR-26		703 ppm (2.0 oz./gal)	10 Min.
Vaccinia virus	Strain IHD	VERO Cells; lytic cytopathic effect	703 ppm (2.0 oz./gal)	10 Min.
Avian Influenza A	H5N1		703 ppm (2.0 oz./gal)	10 Min.
Avian Influenza A	H9N2 Turkey/Wisconsin Virus		703 ppm (2.0 oz./gal)	10 Min.
Avian Reovirus			703 ppm (2.0 oz./gal)	10 Min.
Avian Infectious Bronchitis virus	ATCC VR-22		703 ppm (2.0 oz./gal)	10 Min.
Bovine Viral Diarrhea virus			703 ppm (2.0 oz./gal)	10 Min.
Canine Adenovirus			1055 ppm (2.5 oz./gal)	10 Min.
Canine Coronavirus			703 ppm (2.0 oz./gal)	10 Min.
Canine Distemper virus	ATCC-VR-256		703 ppm (2.0 oz./gal)	10 Min.
Canine Parainfluenza virus			1055 ppm (2.5 oz./gal)	10 Min.
Canine Parvovirus (CPV)			2812 ppm (8.0 oz./gal)	10 Min.
Equine Arteritis virus			703 ppm (2.0 oz./gal)	10 Min.

Organism	Source of Virus or ATCC#	Host System; Cytopathic Effect	Use-Dilution Concentration	Contact Time
Feline Calicivirus			1055 ppm (2.5 oz./gal)	10 Min.
Feline Infectious Peritonitis virus			1055 ppm (2.5 oz./gal)	10 Min.
Feline Leukemia Virus	ATCC VR-717 Strain FL-237		1055 ppm (2.5 oz./gal)	10 Min.
Feline Panleukopenia			1055 ppm (2.5 oz./gal)	10 Min.
Feline Picornavirus	ATCC VR-649		1055 ppm (2.5 oz./gal)	10 Min.
Feline Rhinotrachetis virus			1055 ppm (2.5 oz./gal)	10 Min.
Infectious Bovine Rhinotracheitis virus	ATCC VR-793		703 ppm (2.0 oz./gal)	10 Min.
Infectious Avian Laryotracheitis virus (IBR)			703 ppm (2.0 oz./gal)	10 Min.
Infectious Bronchitis virus			703 ppm (2.0 oz./gal)	10 Min.
Infectious Canine Hepatitis virus			1055 ppm (2.5 oz./gal)	10 Min.
Minute virus of Mice (Parvovirus)			2812 ppm (8.0 oz./gal)	10 Min.
Murine Parainfluenza virus type 1			1055 ppm (2.5 oz./gal)	10 Min.
Newcastle disease virus			703 ppm (2.0 oz./gal)	10 Min.
Porcine Parvovirus			2812 ppm (8.0 oz./gal)	10 Min.
Porcine Respiratory & Reproductive Virus (PRRSV)			703 ppm (2.0 oz./gal)	10 Min.
Porcine Rotavirus			703 ppm (2.0 oz./gal)	10 Min.
Pseudorabies Virus	ATCC VR-135		703 ppm (2.0 oz./gal)	10 Min.
Transmissible Gastroenteritis virus	ATCC VR-763		703 ppm (2.0 oz./gal)	10 Min.

Conclusion: All lots of **Animal Facilities Disinfectant & Cleaner** effectively inactivated the above listed viruses as specified in the test performance standards. **Animal Facilities Disinfectant & Cleaner** meets EPA requirements for hard surface virucidal claims in animal hospital and other environments when diluted to 703 ppm in 400 ppm A.O.A.C. synthetic hard water and in the presence of 5% organic soil.