CAVIWIPES™ AF

Technical Bulletin

CaviWipes™ AF disinfecting towelettes are non-woven disposable towelettes pre-saturated with an alcohol free, quaternary ammonium chlorides based disinfectant cleaner solution. CaviWipes™ AF is a multi-purpose disinfectant intended for use in cleaning, decontaminating and disinfecting hard non-porous, inanimate surfaces in health care settings such as hospitals, laboratories, clinics, dental offices, ophthalmic offices, veterinary facilities and other critical care areas where environmental control of cross contamination between treated surfaces is important.

CaviWipes™ AF EPA Registration number: 1839-223-46781.

BIOCIDAL EFFICACY

CaviWipes™ AF has biocidal effectiveness against the following microorganisms with a 5 minute contact time for:

Mycobacterium tuberculosis BCG (*Mycobacterium bovis*) (TB)
Staphylococcus aureus
Pseudomonas aeruginosa
Salmonella (choleraesuis) enterica
Escherichia coli
Escherichia coli O157:H7
Methicillin resistant *Staphylococcus aureus* (MRSA)
Vancomycin resistant Enterococcus faecalis (VRE)
Bovine Viral Diarrhea Virus (BVDV)
Duck Hepatitis B Virus (DHBV)
Hepatitis B Virus (HBV)
Hepatitis C Virus (HCV)
Influenza A (H1N1) virus (ATCC VR-1469) (Strain A/PR/8/34)
Pandemic 2009 H1N1 Influenza A Virus

2 minute contact time for:

Human Immunodeficiency Virus, (HIV-1) strain HTLV-IIIB, (associated with AIDS)

Tuberculocidal Efficacy Studies:

Test Method:	Pre-Saturated or Impregnated Towelettes for Tuberculocidal Effectiveness (Modified AOAC Confirmative In Vitro Test for Determining Tuberculocidal Activity)
Test Conditions:	**5 minute** contact time, 5% organic soil load, room temperature, 90 day incubation period.
Organisms:	*Mycobacterium bovis,* BCG (*tuberculosis*)
Conclusion:	Under the conditions of this investigation, CaviWipes™ AF demonstrated **tuberculocidal** activity against *Mycobacterium bovis* (BCG) according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a tuberculocide.

Bactericidal Efficacy Studies:

Test Method:	Hard Surface Disinfectant Testing of Towelettes
Test Conditions:	**5 minute** contact time, 5% organic soil load, room temperature.
Organisms:	*Staphylococcus aureus* (ATCC 6538)
	Pseudomonas aeruginosa (ATCC 15442)
	Salmonella (choleraesuis) enterica (ATCC 10708)
	Escherichia coli (ATCC 11229)
	Escherichia coli O157:H7 (ATCC 43895)
	Methicillin resistant *Staphylococcus aureus* (MRSA) (ATCC 33593)
	Vancomycin resistant *Enterococcus faecalis* (VRE) (ATCC 51575)
Conclusion:	Under the conditions of this investigation, CaviWipes™ AF demonstrated **bactericidal** activity against *Staphylococcus aureus*, *Salmonella (choleraesuis) enterica*, *Pseudomonas aeruginosa*, *Escherichia coli*, *Escherichia coli* O157:H7, Methicillin resistant *Staphylococcus aureus* (MRSA), and Vancomycin resistant *Enterococcus faecalis* (VRE) according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a bactericide.

Virucidal Efficacy Studies:

Test Method:	Pre-saturated or Impregnated Towelette for Virucidal Effectiveness (Based on U.S. E.P.A. Pesticide Assessment Guidelines.)
Test Conditions:	Ready-To-Use (RTU), **5 minute** contact time, 5% organic soil load, room temperature
Organisms:	Bovine Viral Diarrhea Virus (BVDV)
	Duck Hepatitis B Virus (DHBV)
	Hepatitis B Virus (HBV)
	Hepatitis C Virus (HCV)
	Influenza A (H1N1) virus (ATCC VR-1469) (Strain A/PR/8/34)
	Pandemic 2009 H1N1 Influenza A Virus (see note below)
Conclusion:	Under the conditions of this investigation, CaviWipes™ AF demonstrated **virucidal** activity against Bovine Viral Diarrhea Virus (BVDV), Duck Hepatitis B Virus (DHBV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Influenza A (H1N1) virus and Pandemic 2009 H1N1 Influenza A Virus according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.
	Note: Per the EPA guidance document dated October 21, 2009, disinfectant products that bear label claims against human, avian, or swine influenza A virus, and have submitted and received approval of efficacy data to support these label claims, may include a label claim against the Pandemic 2009 H1N1 Influenza A Virus.
Test Method:	Pre-saturated or Impregnated Towelette for Virucidal Effectiveness (Based on U.S. E.P.A. Pesticide Assessment Guidelines.)
Test Conditions:	Ready-To-Use (RTU), **2 minute** contact time, 5% organic soil load, room temperature

Organisms: Human Immunodeficiency Virus, (HIV-1) strain HTLV-IIIB, (associated with AIDS)

Conclusion: Under the conditions of this investigation, CaviWipes™ AF demonstrated **virucidal** activity against Human Immunodeficiency Virus (HIV-1) according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

TOXICITY STUDIES

The Toxicity studies were performed on the liquid product, CAVICIDE™ AF, and bridged to CaviWipes™ AF.

Acute Dermal Toxicity Study: Test Guideline/Name: 870.1200 (Acute Dermal LD50)
Acute Dermal Toxicity Study of Detergent Disinfectant Pump Spray (in Rabbit). Unpublished study.
EPA Acceptance Date: February 22, 2005

Acute Skin Irritation Study: Test Guideline/Name: 870.2500 (Acute Dermal Irritation)
Acute Skin Irritation Study of Detergent Disinfectant Pump Spray (in Rabbit). Unpublished study.
EPA Acceptance Date: May 27, 2004.

Acute Oral Toxicity Study: Test Guideline/Name: 870.1100 (Acute Oral LD50)
Acute Oral Toxicity Study of Detergent Disinfectant Pump Spray (in Rats). Unpublished study.
EPA Acceptance Date: February 22, 2005.

Acute Eye Irritation Study: Test Guideline/Name: 870.2400 (Acute Eye Irritation)
Primary Eye Irritation Study of Detergent/Disinfectant Pump Spray (in Rabbits). Unpublished study.
EPA Acceptance Date: February 22, 2005.

Acute Inhalation Toxicity Study: Test Guideline/Name: 870.1300 (Acute Inhalation)
Acute Inhalation Toxicity Study of Detergent Disinfectant Pump Spray.Unpublished study.
EPA Acceptance Date: February 22, 2005.

Dermal Sensitization Study: Test Guideline/Name: 870.2600 (Skin Sensitization)
Dermal Sensitization Study of Detergent Disinfectant Pump Spray. Unpublished study.
EPA Acceptance Date: February 23, 2006.