



CaviWipes™ Bleach

Technical Bulletin

EPA Reg. No. 46781-14

PRODUCT DESCRIPTION

EPA registered CaviWipes Bleach Disinfecting Towelettes are non-woven disposable towelettes pre-saturated with CaviCide Bleach. With patent pending Enhanced Chlorine Technology™ (ECT™) they have demonstrated effectiveness against the following 41 relevant microorganisms in 3 minutes when used as directed on hard, non-porous surfaces. They are recommended for use in medical facilities, ambulances, physicians' offices, long term care facilities, and dental offices.



CHEMICAL INGREDIENTS

Sodium Hypochlorite.....	0.91%
Other Ingredients†.....	99.09%
Total.....	100.00%

[†Does not include the weight of the towelette]

NFPA Rating: Fire: 0 Health: 0 Instability: 0

EFFICACY

SPORICIDAL EFFICACY STUDIES

***Clostridium difficile* spores**

Clostridium difficile spores [ATCC 43598]

Contact time tested

3 minutes

Test Method

ASTM E 2197-11, and the requirements outlined in the EPA Guidance for the Efficacy Evaluation of Products with Sporicidal Claims against *Clostridium difficile*.

Organic soil load

5% Organic load

Test Results

PASSED.

This product met the the sporicidal claims against *Clostridium difficile*, in accordance with the U. S. EPA Guidance passing criterion for this method: that there must be at least an average of 6-Log₁₀ reduction over the average of carrier counts.

BACTERICIDAL EFFICACY STUDIES

Bacteria

Staphylococcus aureus [ATCC 6538]

Pseudomonas aeruginosa [ATCC 15442]

Salmonella enterica [ATCC 10708]

Burkholderia cepacia [ATCC 25416]

Escherichia coli O157:H7 [ATCC 35150]

Klebsiella pneumoniae [ATCC 4352]

Legionella pneumophila [ATCC 33153]

Listeria monocytogenes [ATCC 19117]

Serratia marcescens [ATCC 14756]

Streptococcus pyogenes [ATCC 12344]

Neisseria gonorrhoeae [ATCC 43069]

Bacteria (Continued)

Contact time tested
Test Method
Organic soil load
Test Results

3 minutes
AOAC Germicidal Spray Products as Disinfectants Test modified for towelettes
5% Organic load
PASSED

Drug-Resistant Bacteria

Enterobacter cloacae [ATCC BAA-2468]
Multidrug Resistant *Acinetobacter baumannii* (MRAB) [ATCC BAA-1605]
Carbapenem-resistant *Klebsiella pneumoniae* (CRKP) (CRE) [ATCC BAA-1705]
Methicillin Resistant *Staphylococcus aureus* (MRSA) [ATCC 33592]
Penicillin Resistant *Streptococcus pneumoniae* [ATCC 700677]
Vancomycin Resistant *Staphylococcus aureus* (VRSA) [NARSA VRS1]
Vancomycin Resistant *Enterococcus faecalis* (VRE) [ATCC 51575]
Escherichia coli ESBL [ATCC BAA-196]

Contact time tested
Test Method
Organic soil load
Test Results

3 minutes
AOAC Germicidal Spray Products as Disinfectants Test modified for towelettes
5% Organic load
PASSED

TUBERCULOCIDAL EFFICACY STUDIES

Mycobacterium

Mycobacterium tuberculosis var: *bovis* (BCG) (TB)

Contact time tested
Test Method
Organic soil load
Test Results

3 minutes
AOAC Germicidal Spray Products as Disinfectants Test modified for towelettes
5% Organic load
PASSED.
Under the test conditions this product 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.

FUNGICIDAL EFFICACY STUDIES

Pathogenic Fungi

Contact time tested
Test Method
Organic soil load
Test Results

Candida albicans [ATCC 10231]
Aspergillus brasiliensis [ATCC 16404]
Trichophyton interdigitale (formerly *Trichophyton mentagrophytes*) [ATCC 9533]

3 minutes

AOAC Germicidal Spray Products as Disinfectants Test modified for towelettes
5% Organic load
PASSED

VIRUCIDAL EFFICACY STUDIES

Non-enveloped Viruses

Contact time tested
Test Method
Organic soil load
Test Results

Adenovirus [ATCC VR-846]
Hepatitis A [Strain HM-175]
Norovirus (as Feline Calicivirus) [ATCC VR-782]
Poliovirus, Chat Strain [ATCC VR-1562]
Rhinovirus [ATCC VR-1147] [(Strain 151-1)]
Enterovirus (EV-D68) [ATCC VR-561]
Rotavirus [ATCC VR-2018]

3 minutes

Virucidal Hard Surface Efficacy Test for Pre-Saturated or Impregnated Towelettes.
5% Organic load
PASSED

Enveloped Viruses

Contact time tested
Test Method
Organic soil load
Test Results

Herpes simplex virus (type 1) [ATCC VR-260] [Strain HF]
Herpes simplex virus (type 2) [ATCC VR-734] [Strain G]
Human Coronavirus [ATCC VR-740] [Strain 229E]
Influenza A virus Strain A/Hong Kong 8/68 (H3N2) [Charles River Labs]
Influenza B virus Strain B/Hong Kong/5/72 [ATCC VR-823]
Duck Hepatitis B virus (HBV) [Strain Grimaud]
Bovine-Viral Diarrhea Virus Hepatitis C virus (HCV) [Strain NADL] [ATCC VR-1422]
HIV-1 (Human Immunodeficiency Virus type 1) [Strain III B (B)] [ZeptoMetrix]
Respiratory syncytial virus (RSV) [ATCC VR-26] [(Strain Long)]

3 minutes

Virucidal Hard Surface Efficacy Test for Pre-Saturated or Impregnated Towelettes.
5% Organic load
PASSED

Non-enveloped Parvoviruses

Contact time tested
Test Method
Organic soil load
Test Results

Canine Parvovirus [ATCC VR-2017] [(Cornell Strain)]

3 minutes

Virucidal Hard Surface Efficacy Test for Pre-Saturated or Impregnated Towelettes.
5% Organic load
PASSED

Bloodborne Pathogens

Duck Hepatitis B virus (HBV) [Strain Grimaud]
 Bovine-Viral Diarrhea Virus Hepatitis C virus (HCV) [Strain NADL] [ATCC VR-1422]
 HIV-1 (Human Immunodeficiency Virus type 1) [Strain III B (B)] [ZeptoMetrix]

Contact time tested
 Test Method
 Organic soil load
 Test Results

3 minutes

Virucidal Hard Surface Efficacy Test for Pre-Saturated or Impregnated Towelettes.
 5% Organic load
 PASSED

NOTE: All microbiocidal efficacy tests meet the EPA OCSPP 810.2000 and 810.2200 Product Performance Test Guidelines, as applicable.

TOXICITY

Study	Category	Test Guideline	Test Results
Acute Oral	Category IV	OCSPP 870.1100	The acute oral LD50 for this product indicated by the data, is determined to be greater than 5000 mg/kg.
Acute Dermal	Category IV	OCSPP 870.1200	The acute dermal LD50 for this product indicated by the data, is greater than 5050 mg/kg.
Acute Inhalation	Category IV	OCSPP 870.1300	The acute inhalation LC50 for this product indicated by the data, is greater than 2.21 mg/L.
Primary Eye Irritation	Category IV	OCSPP 870.2400	No irritation was observed in any eyes at 72 hours. All positive effects cleared by 24 hours.
Primary Skin Irritation	Category IV	OCSPP 870.2500	The primary irritation index was obtained from observations at 1, 24, 48 and 72 hours, and used to give this product a descriptive rating of slightly irritating.
Skin Sensitization	Product is not a sensitizer	OCSPP 870.2600	The product produced no reaction after the challenge treatment in this test. Therefore, this product is not a sensitizer.

Chronic Hazards: None expected.

Carcinogen: None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.