Micro-Kill® One

Germicidal Alcohol Wipes technical data bulletin

EPA Reg. No. 88494-2-37549

Product Description

Medline Micro-Kill® One Germicidal Alcohol Wipes is a durable polypropylene cloth that features a quaternary ammonium and alcohol solution to kill 25 microorganisms, including gram positive, gram negative and multi-drug resistant bacteria; encapsulated bacteria; mycobacteria; enveloped and non-enveloped, large and small viruses; and fungi; with a 1 minute contact time. The disinfecting wipe is for use on hard, non-porous surfaces only, including medical and dental surfaces, exam tables, carts, patient care equipment, point-of-care equipment, telephones, sinks, toilet seats, glazed porcelain, stainless steel, Formica®, vinyl, rubber and most plastic surfaces.

Chemical composition

Active Ingredients:	**Percentage**
Ethyl Alcohol	72.50%
Didecyl Dimethyl Ammonium Chloride	0.33%
Other Ingredients‡	27.17%
Total	**100.00%**

‡Other ingredients do not include the weight of the dry wipes.

Efficacy

Bacterial organism efficacy

Mycobacteria

Organism	*Mycobacterium bovis* (ATCC 35743)
Test method used	Modified AOAC 18th Edition Tuberculocidal Test (Germicidal Spray Test) on Pre-Saturated or Impregnated Towelettes [based on AOAC Official Method 961.02 Germicidal Spray Products as Disinfectants]
Organic soil load	5% Fetal Bovine Serum
Exposure time	1 minute at room temperature
Incubation	60 days at 37±1°C
Results	When tested undiluted [RTU] and in the presence of 5% organic load did pass in a one minute contact time against *Mycobacterium bovis*. (December 24, 2012).

Encapsulated bacteria

Organism	*Klebsiella pneumonia* (ATCC 4352)
Test method used	AOAC 18th Edition Supplemental Claim Efficacy Germicidal Spray Test, confirmed by Modified AOAC Hospital Claim Germicidal Spray Test on Pre-Saturated or Impregnated Towelettes
Organic soil load	5% Fetal Bovine Serum
Exposure time	1 minute at room temperature
Incubation	48 hours at 36±1°C
Results	When tested undiluted [RTU] and in the presence of 5% organic load did pass in a one minute contact time against *Klebsiella pneumoniae*. (October 17, 2011); confirmed on towelettes (November 26, 2012).

Gram positive bacteria

Organisms	*Staphylococcus aureus* (ATCC 6538) *Streptococcus pyogenes* (ATCC 19615) *Listeria monocytogenes* (ATCC 984)
Test method used	AOAC 18th Edition Hospital Claim Germicidal Spray Test, and AOAC 18th Edition Supplemental Claim Efficacy Germicidal Spray Test, confirmed by Modified AOAC Hospital Claim Germicidal Spray Test on Pre-Saturated or Impregnated Towelettes
Organic soil load	5% Fetal Bovine Serum
Exposure time	1 minute at room temperature
Incubation	48 hours at 36±1°C
Results	When tested undiluted [RTU] and in the presence of 5% organic load did pass in one minute contact time against *Staphylococcus aureus* (October 6, 2011), *Streptococcus pyogenes* (November 23, 2011), *Listeria monocytogenes* (November 23, 2011); all tests confirmed on towelettes (November 26, 2012).

Gram negative bacteria

Organisms	*Pseudomonas aeruginosa* (ATCC 15442) *Salmonella enterica* (ATCC 10708) *Acinetobacter baumannii* (ATCC 19606) *Burkholderia cepacia* (ATCC 25416) *Campylobacter jejuni* (ATCC 29428) *Escherichia coli* O157:H7 (ATCC 35150)
Test method used	AOAC 18th Edition Hospital Claim Germicidal Spray Test, and AOAC 18th Edition Supplemental Claim Efficacy Germicidal Spray Test, confirmed by Modified AOAC Hospital Claim Germicidal Spray Test on Pre-Saturated or Impregnated Towelettes
Organic soil load	5% Fetal Bovine Serum
Exposure time	1 minute at room temperature
Incubation	48 hours at 36±1°C
Results	When tested undiluted [RTU] and in the presence of 5% organic load did pass in one minute contact time against *Pseudomonas aeruginosa* and *Salmonella enterica* (October 6, 2011), *Acinetobacter baumanni* (December 20, 2011), *Burkholderia cepacia* (December 20, 2011), *Campylobacter jejuni* (January 9, 2012), *Escherichia coli* (November 23, 2011); all tests confirmed on towelettes (November 26, 2012).

Multi-drug resistant bacteria

Organisms	Methicillin Resistant *Staphylococcus aureus* (MRSA) (ATCC 33591) Vancomycin Resistant *Enterococcus faecium* (VRE) (ATCC 51559)
Test method used	AOAC 18th Edition Supplemental Claim Efficacy Germicidal Spray Test, confirmed by Modified AOAC Hospital Claim Germicidal Spray Test on Pre-Saturated or Impregnated Towelettes
Organic soil load	5% Fetal Bovine Serum
Exposure time	1 minute at room temperature
Incubation	48 hours at 36±1°C
Results	When tested undiluted [RTU] and in the presence of 5% organic load did pass in one minute contact time against Methicillin Resistant *Staphylococcus aureus* (MRSA) (November 14, 2011), Vancomycin Resistant *Enterococcus faecium* (VRE) (November 23, 2011); all tests confirmed on towelettes (November 26, 2012).

Viral organism efficacy

Bloodborne pathogens

Organisms	Hepatitis B Virus (HBV) Hepatitis C Virus (HCV) Human Immunodeficiency Virus (HIV-1) (AIDS)
Test method used	Modified AOAC 18th Edition Germicidal Spray Test (including both Initial and Confirmatory for Hepatitis B and C), confirmed by Pre-Saturated or Impregnated Towelettes Virucidal Effectiveness Test
Organic soil load	>5% combination of natural organic matter and Fetal Bovine Serum (for Hepatitis B), 10% Horse Serum (for Hepatitis C), 10% Fetal Bovine Serum (for HIV-1 and towelette confirmatory)
Exposure time	1 minute at room temperature
Results	When tested undiluted [RTU] and in the presence of organic load did pass in one minute contact time against Hepatitis B (March 13, 2012), Hepatitis C (March 12, 2012), HIV-1 (December 20, 2011); all tests confirmed on towelettes (November 29, 2012).

Enveloped viruses

Organisms	Human Coronavirus (VR-1558) Herpes Simplex Virus Type 1 (VR-539) Influenza Virus Type A2 (Flu) (VR-544) Respiratory Synctial Virus (VR-26)
Test method used	Modified AOAC 18th Edition Germicidal Spray Test, confirmed by Pre-Saturated or Impregnated Towelettes Virucidal Effectiveness Test
Organic soil load	5% Fetal Bovine Serum, 10% Fetal Bovine Serum (for towelette confirmatory)
Exposure time	1 minute at room temperature
Results	When tested undiluted [RTU] and in the presence of organic load did pass in one minute contact time against Human Coronavirus (December 20, 2011), Herpes Simplex Virus Type 1 (December 7, 2011), Influenza Virus Type A2 (December 20, 2011), Respiratory Synctial Virus (December 7, 2011); all tests confirmed on towelettes (November 29, 2012).

Large non-enveloped viruses

Organism	Rotavirus Strain WA
Test method used	Modified AOAC 18th Edition Germicidal Spray Test, confirmed by Pre-Saturated or Impregnated Towelettes Virucidal Effectiveness Test
Organic soil load	5% Fetal Bovine Serum, 10% Fetal Bovine Serum (for towelette confirmatory)
Exposure time	1 minute at room temperature
Results	When tested undiluted [RTU] and in the presence of organic load did pass in one minute contact time against Rotavirus (December 21, 2011); confirmed on towelettes (November 29, 2012).

Small non-enveloped viruses

Organism	Norovirus (Feline Calicivirus tested as surrogate) Poliovirus (ATCC VR-1562) Rhinovirus (ATCC VR-340)
Test method used	Modified AOAC 18th Edition Germicidal Spray Test (including both initial and confirmatory for Norovirus), confirmed by Pre-Saturated or Impregnated Towelettes Virucidal Effectiveness Test
Organic soil load	5% Fetal Bovine Serum, 10% Fetal Bovine Serum (for towelette confirmatory)
Exposure time	1 minute at room temperature
Results	When tested undiluted [RTU] and in the presence of organic load did pass in one minute contact time against Norovirus (March 12, 2012), Poliovirus (October 3, 2011), Rhinovirus (December 20, 2011); all tests confirmed on towelettes (November 29, 2012).

Fungal organism efficacy

Organisms	*Trichophyton mentagrophytes* (ATCC 9533) (Causative agent of Athlete's Foot Fungus)
Test method used	Modified AOAC Fungicidal-Germicidal Spray Test on Pre-Saturated or Impregnated Towelettes
Organic soil load	5% Fetal Bovine Serum
Exposure time	1 minute at room temperature
Results	When tested undiluted [RTU] and in the presence of organic load did pass in one minute contact time against *Trichophyton mentagrophytes*.