

EZ-Kill[®] and EZ-Kill[®] XL **Disinfecting/Deodorizing/Cleaning Wipes**

For Use On Hard, Non-porous Surfaces Where Control
Of Cross Contamination Is Required

Technical Data Bulletin



Meets CMS TAG F441 Requirements

Item #	Description	UOM
7105	Disinfecting Wipe, 10" x 10" sheet size	65 wipes / tub 12 tubs / cs
7110	Disinfecting Wipe, 6" x 6.75" sheet size	160 wipes / tub 12 tubs / cs

EZ-Kill® and EZ-Kill® XL

Disinfecting/Deodorizing/Cleaning Wipes

PRODUCT DESCRIPTION

EZ-Kill® and EZ-Kill® XL is a nonwoven disposable cloth containing a stable, low pH formulated disinfectant and deodorant for use on hard, non-porous surfaces, in hospitals, intensive care units, surgery, recovery anesthesia, X-ray, Cat. Lab, orthopedics, newborn nursery, respiratory therapy, emergency medical settings, laboratories, clinics, nursing facilities, medical offices, dental offices, veterinary facilities, janitorial, commercial, and where control of cross-contamination is required. For use on hard non-porous surfaces only; such as stainless steel, Formica, glass tables, carts, baskets, counters, cabinets and telephones.

CHEMICAL COMPOSITION

ACTIVE INGREDIENTS

N-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl ammonium chloride	0.12%
N-Alkyl (68% C12, 32% C14) dimethyl ethyl benzyl ammonium chloride	0.12%
Isopropyl Alcohol.....	41.58%
OTHER INGREDIENTS	58.18%
TOTAL	100.00%

EFFICACY

EFFICACY SYNOPSIS

Kill Time

(Required contact time as indicated on the product label)

<i>Mycobacterium tuberculosis</i>	2 minutes
Human Hepatitis B virus	2 minutes
Human Hepatitis C virus	2 minutes
Herpes Simplex virus 2 (genital herpes virus)	2 minutes
Influenza A (A2 Japan)	2 minutes
<i>Pseudomonas aeruginosa</i>	2 minutes
<i>Salmonella enterica</i>	2 minutes
<i>Escherichia coli</i> 0157:H7	2 minutes
Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA)	2 minutes
<i>Staphylococcus aureus</i>	2 minutes
<i>Vancomycin Resistant Enterococcus faecalis</i> (VRE)	2 minutes
HIV-1 (AIDS virus) [See label for complete information]	1 minute
<i>Trichophyton mentagrophytes</i>	5 minutes

BACTERIAL ORGANISM EFFICACY

Organisms: *Escherichia coli* 0157:H7
Methicillin Resistant *Staphylococcus aureus* (MRSA)
Salmonella enterica
Pseudomonas aeruginosa
Staphylococcus aureus
Vancomycin Resistant *Enterococcus faecalis*

Test Method Used: EPA Test Wipe
Organic Soil Load: 5% Heat-inactivated horse serum
Exposure Time: 2 minutes at 20-22°C (room temperature)
Incubation: 48 ± 2 hours at 37 ± 2°C
Results: Passed

Organisms: *Mycobacterium tuberculosis* (*Mycobacterium bovis* BCG)

Test Method Used: EPA Test Wipe
Organic Soil Load: 5% Heat-inactivated horse serum
Exposure Time: 2 minutes at 22°C (room temperature)
Incubation: 90 days at 37 ± 2°C
Results: Passed

FUNGICIDAL ORGANISM EFFICACY

Organisms: *Trichophyton mentagrophytes*

Test Method Used: AOAC Fungicidal Efficacy Test
Organic Soil Load: 5% Heat-inactivated horse serum
Exposure Time: 5 minutes at 20±2°C
Incubation Test and Fungistasis: 10 days at 25-30°C
Results: Passed

VIRAL ORGANISM EFFICACY

Organisms: Herpes Simplex virus 2 (genital herpes virus)
Influenza A (A2 Japan)

Test Method Used: EPA Test Wipe
Organic Soil Load: 5% serum
Exposure Time: 2 minutes at 20°C (room temperature)
Incubation: 6-8 days (4-6 days Influenza A) at 36 ± 2°C with 5 ± 1% CO₂
Results: Passed

Organisms: Human Hepatitis B virus (Duck Hepatitis B virus)
Human Hepatitis C virus (Bovine Viral Diarrhea virus)

Test Method Used: EPA Test Wipe
Organic Soil Load: 5% serum
Exposure Time: 2 minutes at 19°C (room temperature)
Incubation: 9-13 days (7-9 days Human Hepatitis C) hours at 36 ± 2°C with 5 ± 1% CO₂
Results: Passed

HIV-1 (AIDS virus) [See label for complete information]

TOXICITY¹

Acute Oral Toxicity Study (U.S. EPA Health Effects Guidelines, OPPTS 870.1100 (2002))

Acute Oral Toxicity Up and Down Procedure in Rats:

All animals survived exposure to the test substance and gained body weight during the study. The animals recovered by Day 5 and appeared active and healthy for the remainder of the 14-day observation period.

Conclusion: A single-dose of the product solution was administered and observed for 14 days. Based on the results of this study has an acute oral toxicity LD50 greater than 5,000mg/kg of body weight.

Primary Eye Irritation (U.S. EPA Health Effects Guidelines, OPPTS 870.2400 (1998))

Primary Eye Irritation Study in Rabbits:

One hour after the test substance instillation, all treated eyes exhibited corneal opacity, iritis, and conjunctivitis. The overall incidence and severity of irritation decreased gradually with time. All animals were free of ocular irritation by Day 10 (study termination).

Conclusion: One eye of each rabbit was instilled with the solution, while the contralateral eye remained untreated and served as a control. Ocular lesions were evaluated by method of Draize at 1, 24, 42, and 72 hours; and days 4, 7, and 10 after instillation. The product solution produced eye irritation clearing in 10 days or less. Under the conditions of this study, the product solution is classified as moderately irritating to the eye.

Acute Dermal Toxicity Study (U.S. EPA Health Effects Guidelines, OPPTS 870.1200 (1998))

Acute Dermal Toxicity in Rats-Limit Test:

All animals survived, gained body weight, and appeared active and healthy. There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior.

Conclusion: Following the single dermal administration, the animals were observed for 14 days. Under the conditions of this test, the acute dermal LD50 was found to be greater than 5,000mg/kg of body weight.

Primary Dermal Irritation (U.S. EPA Health Effects Guidelines, OPPTS 870.2500 (1998))

Dermal Irritation Study in Rabbits

One hour after patch removal, all treated sites exhibited very slight erythema. All animals were free of dermal irritation by 24 hours.

Conclusion: Under the conditions of this study, the product solution is classified as moderately irritating to the skin.

Dermal Sensitization Study in Guinea Pigs (U.S. EPA Health Effects Guidelines, OPPTS 870.2600 (1998)):

Conclusion: Based on these findings and on the evaluation system used, the product solution is not considered to be a contact sensitizer.

¹ Testing done by Performing Laboratory:

Staphylococcus aureus, *Pseudomonas aeruginosa*, Methicillin Resistant *Staphylococcus aureus* (MRSA), E. Coli - June 26, 2009
Vancomycin Resistant *Enterococcus faecalis* (VRE) - July 16, 2009
Tuberculicidal Effectiveness - October 31, 2008
Human Influenza A Virus, Herpes Simplex Virus Type 2 - May 28, 2009
Hepatitis B Virus - March 12, 2009
Hepatitis C Virus - February 27, 2009
Trichophyton mentagrophytes (Athlete's foot fungus) - May 11, 2000