



## #73 LAV-CIDE EPA Reg. No. 1839-83-1674

### EFFICACY DATA

#### VIRUCIDAL DATA:

- Test Method:**
- Q United States E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2(f), and Section 91-30 (d), (e), November, 1982.
  - † Protocols for Testing the Efficacy of Disinfectants against Hepatitis B Virus (HBV) (EPA, Federal Register, Vol. 65, No. 166, 8/25/2000, p. 51828).
  - ‡ Protocol for Testing Disinfectants against Hepatitis C Virus using Bovine Viral Diarrhea Virus as approved by the U.S. EPA on August 15, 2002.

**Test Conditions:** 5% serum, 10 minute contact time, glass Petri dish substrates

#### Results:

Test Organism	Lav-Cide Sample	Titer Reduction (10 minute contact)
† Hepatitis B Virus (HBV) (Duck Hepatitis B Virus-DHBV)	A	≥3.0 log
	B	≥3.0 log
‡ Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus-BVDV)	A	≥5.5 log
	B	≥5.5 log
Q Poliovirus Type I, strain Brunhilde (ATCC VR-1000)	A	≥3.25 log
	B	≥3.25 log
Q Human Immunodeficiency Virus, HTLV-III <sub>RP</sub> , strain of HIV-I (associated with AIDS)	A	≥3.5 log
	B	≥3.5 log
Q Canine Parvovirus (ATCC VR-2017)	A	≥3.0 log
	B	≥3.0 log

**Conclusion:** Under the conditions of this investigation, Lav-Cide was **virucidal** for Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Poliovirus Type I, Human Immunodeficiency Virus (HIV-I), and Canine Parvovirus according to criteria established by the U. S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

**TUBERCULOCIDAL DATA:**

**Test Method:** AOAC Confirmative In Vitro Test for Determining Tuberculocidal Activity

**Test Organism:** *Mycobacterium bovis* BCG (OT 105401)

**Test Conditions:** 5% serum, 10 minute contact time, glass slide carrier substrates

**Results:**

Subculture Media	Lav-Cide Sample	No. of Exposed Carriers	No. of Carriers Showing Growth (10 min. contact)	PHENOL RESISTANCE		
				Dilution	No. of Carriers Showing Growth	
					(62 days)	(90 days)
Modified Proskauer-Beck Medium	A	10	0	1:50	0	0
	B	10	0	1:75	0	0
Middlebrook 1H9Broth	A	10	0	1:50	0	0
	B	10	0	1:75	10	10
Kirchners Medium	A	10	0	1:50	0	0
	B	10	0	1:75	5	6

**Conclusion:** Under the conditions of this investigation, LAV-CIDE was **tuberculocidal** for *Mycobacterium bovis* according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a tuberculocide.

**MILDEW FUNGISTATIC DATA:**

**Test Method:** EPA Hard Surface Mildew Fungistatic Test

**Test Organism:** *Aspergillus niger* (ATCC 6275)

**Test Conditions:** glazed ceramic tile substrates

**Results:**

Sample	Exposed Tiles	Tiles Showing Growth
Lav-Cide	10	0
Control	10	10

**Conclusion:** Under the conditions of this investigation, Lav-Cide was **fungistatic** for *Aspergillus niger* according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a fungistat.

**BACTERICIDAL AND FUNGICIDAL DATA:**

**Test Method:** AOAC Germicidal Spray Products as Disinfectants

**Test Conditions:** 5% serum, 10 minute contact time, glass slide carrier substrates, Model 4 Bakan 22/415 pump sprayer or equivalent

**Results:**

Organism	Lav-Cide Sample	No. of Carriers		PHENOL RESISTANCE			
				Dilution	Exposure Time (min.) vs. Growth		
		Exposed	Positive		5	10	15
Staphylococcus aureus (ATCC 6538)	A	60	0	1:60	+	0	0
	B	60	0	1:70	+	+	+
	C	60	0				
Salmonella choleraesuis (ATCC 10708)	A	60	0	1:90	+	0	0
	B	60	0	1:10	+	+	+
	C	60	0				
Pseudomonas aeruginosa PRD-10 (ATCC 15442)	A	60	0	1:80	+	0	0
	B	60	0	1:90	+	+	+
	C	60	0				
Enterococcus faecalis (Vancomycin resistant) (VRE) (ATCC 51229)	A	10	0	A phenol control was not performed due to lack of data available for this strain of test organism.			
	B	10	0				
Escherichia coli 0157:H7 (ATCC 35150)	A	10	0				
	B	10	0				
Staphylococcus aureus (Methicillin resistant) (MRSA) (ATCC 33592)	A	10	0				
	B	10	0				
Staphylococcus aureus (Vancomycin intermediate resistant) (VISA) (HIP 5836)	A	10	0				
	B	10	0				
Trichophyton mentagrophytes (ATCC 9533)	A	60	0	1:60	+	0	0
	B	60	0	1:70	+	+	+
	C	60	0				
				+ = growth 0 = no growth			

**Conclusion:** Under the conditions of this investigation, Lav-Cide was **bactericidal** for *Staphylococcus aureus*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*, *Enterococcus faecalis* (Vancomycin resistant) (VRE), *Escherichia coli* 0157:H7, *Staphylococcus aureus* (Methicillin resistant) (MRSA), and *Staphylococcus aureus* (Vancomycin intermediate resistant) (VISA) and **fungicidal** for *Trichophyton mentagrophytes* according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a bactericide and fungicide.