

AIRX[®] 44 HBV GERMICIDAL DETERGENT

REGISTERED TO KILL HEPATITIS B AT 2 OUNCES PER GALLON OF WATER IN THE PRESENCE OF ORGANIC SOIL (5% BLOOD SERUM)

DESCRIPTION

Airx44HBV is a highly concentrated combination of quaternary ammonium germicides, non-ionic detergents, modern chelating agents and odor counteractants that are uniquely distinguished by being recognized by the EPA as killing Hepatitis B Virus as well as a broad range of other pathogenic and putrefactive microorganisms.

SPECIFICATIONS

ACTIVE INGREDIENTS:

n-Alkyl (60%C14, 30%C16, 5%C12, 5%C18)	
dimethyl benzyl ammonium chloride	2.25%
n-Alkyl (68%C12, 32%C14)	
dimethyl ethylbenzyl ammonium chloride	2.25%
INERT INGREDIENTS.....	95.50%
TOTAL.....	100.00%

CHEMICAL AND PHYSICAL CHARACTERISTICS

TYPE GERMICIDES	Dual quaternary blend
TYPE DETERGENTS	Non-ionic
ODOR COUNTERACTANT	Airx proprietary additive
COLOR	Purple
pH CONCENTRATE	11.5±0.5
pH 1:64 DILUTION	11.1±0.5
VISCOSITY	Free flowing liquid, 6 cps±3
FOAMING	Low, fast breaking
FILM RESIDUE	None
SOLUBILITY IN WATER	Mixes readily in hot or cold, soft or hard water
FREEZE-THAW STABILITY	No degradation
BIODEGRADABLE	Yes, both detergents & germicides
FLOOR CONDUCTIVITY	No adverse effects
SHELF LIFE	2 years minimum
REFRACTIVE INDEX	1.3595±0.0015
SPECIFIC GRAVITY (Gm/MI)	1.035±0.010
FLASH POINT	None
DISCOLORATION	Non-staining

EFFECTIVE AGAINST EPA OFFICIAL TEST ORGANISMS

TEST PROCEDURE: Testing was done in accordance with the Use-Dilution Test Method: A.O.A.C., Twelfth Edition, Section 4, against Staphylococcus aureus and Salmonella choleraesuis, with the disinfectant cleaner diluted at 2 ounces per gallon (1:64), using hard water and with 5% blood serum added to the inoculum as soil load.

CONFIRMATORY TESTING WITH 300 ppm HARD WATER

Test organism	ATCC #	# Carriers	# Positives
Staphylococcus aureus	6538	20	0
Salmonella choleraesuis	10708	20	0

CONFIRMATORY TESTING WITH 400 ppm HARD WATER

Test organism	ATCC #	# Carriers	# Positives
Staphylococcus aureus	6538	20	0
Salmonella choleraesuis	10708	20	0

CONCLUSION: Results demonstrate kill against the official strains of bacteria required for EPA registration when used with water of 400 ppm hardness in the presence of 5% blood serum.

EFFECTIVE FOR USE IN HOSPITALS

TEST PROCEDURE: Testing was done with 10 minute contact time in accordance with Use-Dilution Test Method: A.O.A.C., Twelfth Edition, Section 4 against Pseudomonas aeruginosa with the disinfectant cleaner diluted at 2 ounces per gallon (1:64), using hard water and with 5% blood serum added to the inoculum as soil load.

Test organism	ATCC #	# Carriers	# Positives
Pseudomonas aeruginosa	15442	20	0

CONCLUSION: Results demonstrate kill against the highly resistant bacteria Pseudomonas aeruginosa and Airx44 HBV thus qualifies for hospital use, even when used with water of 400 ppm hardness and in the presence of 5% blood serum.

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EFFECTIVE AGAINST A WIDE RANGE OF PATHOGENIC ORGANISMS

TEST PROCEDURE: Testing was done against the following organisms with the disinfectant cleaner diluted at 2 ounces per gallon (1:64) using hard water with blood serum added to the innoculum as soil load.

ISOLATES FROM AIDS PATIENTS	# CARRIERS	# POSITIVES
Aspergillus niger	20	0
Candida albicans	20	0
Cryptococcus neoformans	20	0
Pseudomonas aeruginosa	20	0
Staphylococcus aureus	20	0
Streptococcus pneumoniae	20	0

GRAM POSITIVE CLINICAL ISOLATES	# CARRIERS	# POSITIVES
Micrococcus luteus	20	0
Staphylococcus aureus	20	0
Staphylococcus aureus (Toxic shock)	20	0
Staphylococcus epidermidis	20	0
Staphylococcus saprophyticus	20	0
Streptococcus hemolyticus	20	0
Streptococcus faecalis	20	0

VIRUCIDAL ACTIVITY	# CARRIERS	# POSITIVES
Adeno Type 2	20	0
Cytomegalo	20	0
HBV (Hepatitis B Virus)	20	0
Herpes Simplex type 1	20	0
Herpes Simplex type 2	20	0
HIV-1 (AIDS Virus)	20	0
Influenza A2-Asian	20	0
Influenza B (Allen strain)	20	0
Influenza C (Taylor strain)	20	0
Measles Virus	20	0
Parainfluenza type 1	20	0
Polio type 1 (Chat strain)	20	0
Pseudorabies	20	0
T1 bacteriophage	20	0
T4 bacteriophage	20	0
Vaccinia	20	0

OTHER ORGANISMS	# CARRIERS	# POSITIVES
Brevibacterium ammoniagenes	20	0
Enterobacter aerogenes	20	0
Escherichia coli	20	0
Pseudomonas aeruginosa	20	0
Pseudomonas choleraesuis	20	0
Morganella morgani	20	0
Salmonella schottmuelleri	20	0
Shigella dysenteriae	20	0
Streptococcus salivarius	20	0
Trichophyton mentagrophytes	20	0

CONCLUSION: Results demonstrate kill against the organisms listed when diluted at 2 ounces per gallon (1:64) using hard water with blood serum added to the innoculum as soil load.