ANIMAL PATHOGENS ONLY LISTED FOR THE PRODUCT, ADDITIONAL PATHOGENS FORWARDED UPON REQUEST

TEST SUBSTANCE EVALUATION CRITERIA

According to the US Environmental Protection Agency and Health Canada, the test substance passes the Virucidal Hard-Surface Efficacy Test if the product demonstrates a ≥ 3 Log_{10} reduction on each surface in the presence or absence of cytotoxicity taking into account the level of neutralization when the minimum recoverable viral titer is ≥ 4.80 Log_{10} per carrier. If cytotoxicity is present, the virus control titer should be increased, if necessary, to demonstrate a ≥ 3 Log_{10} reduction in viral titer on each surface beyond the cytotoxic level and taking into account the level of neutralization.

CONCLUSIONS

When tested as described, PreVasive Botanical Disinfectant Cleaner, Lot Nos. 211721 and 011721 passed the Virucidal Hard-Surface Efficacy Test when Avian Influenza Virus (H5N1), containing 5.0% Fetal Bovine Serum, was exposed to the test substance for 0 minutes 90 seconds at 21°C and 23-24% RH.

All controls met the criteria for a valid test. These conclusions are based on observed data.

Avian influenza H5N1/ BAC AG 25 B MINIMAL RISK) / PreVasive Botanical Disinfectant

RESULTS (continued)

Table 2
Test Substance

Dilution*	PreVasive Botanical Disinfectant Cleaner	
	Lot No. 211721	Lot No. 011721
10^{-1}	T/4	T/4
10^{-2}	T/4	T/4
10^{-3}	0/4	0/4
10^{-4}	0/4	0/4
10^{-5}	0/4	0/4
10^{-6}	0/4	0/4
Titer (Log_{10} $TCID_{50}$/mL)	≤ 3.50	≤ 3.50
Load (Log_{10} $TCID_{50}$)	≤ 3.14**	≤ 3.12***
Log_{10} Reduction per carrier	≥ 3.25	≥ 3.27
Log_{10} Reduction per mL	≥ 3.25	≥ 3.25

*Dilution refers to the fold of dilution from the virus inoculum.
**0.44 mL of Undilute [10^0]
***0.42 mL of Undilute [10^0]

Table 3
Neutralizer Effectiveness/Viral Interference (NE/VI) and Cytotoxicity (CT) Controls

Dilution*	PreVasive Botanical Disinfectant Cleaner	
	Lot No. 211721	
	NE/VI	CT
10^{-1}	T/4	T/4
10^{-2}	T/4	T/4
10^{-3}	4/4	0/4

TEST SUBSTANCE EVALUATION CRITERIA

According to the US Environmental Protection Agency, the test substance passes the test if the following criteria are met:

- The test substance must demonstrate a ≥ 3 Log_{10} reduction on each test carrier in the presence or absence of cytotoxicity, taking into account the level of neutralization when the minimum recoverable viral titer is ≥ 4.80 Log_{10} per test carrier.
- If cytotoxicity is present, the virus control titer should be increased to demonstrate a ≥ 3 Log_{10} reduction in viral titer on each test carrier beyond the cytotoxic level and taking into account the level of neutralization.

CONCLUSIONS

When tested as described, PreVasive Botanical Disinfectant, Lot Nos. 211721 and 011721 passed the Virucidal Hard-Surface Efficacy Test when Porcine Epidemic Diarrhea Virus (PEDV), containing 5.0% Newborn Calf Serum, was exposed to the test substance for 2 minutes 0 seconds at 22°C and 30% RH.

All controls met the criteria for a valid test. These conclusions are based on observed data.

PEDV (BAC AG 25 B MINIMAL RISK)) PreVasive Botanical Disinfectant and Cleaner

RESULTS (continued)

Table 2
Test Substance

Dilution*	PreVasive Botanical Disinfectant	
	Lot No. 211721	Lot No. 011721
10^{-1}	T/4	T/4
10^{-2}	T/4	T/4
10^{-3}	0/4	0/4
10^{-4}	0/4	0/4
10^{-5}	0/4	0/4
10^{-6}	0/4	0/4
Titer (Log_{10} $TCID_{50}$/mL)	≤ 3.50	≤ 3.50
Load (Log_{10} $TCID_{50}$)	≤ 3.10	≤ 3.10
Log_{10} Reduction per carrier	≥ 3.00	≥ 3.00
Log_{10} Reduction per mL	≥ 3.00	≥ 3.00

*Dilution refers to the fold of dilution from the virus inoculum.
**0.40 mL of Undilute [10^0]

Table 3
Neutralizer Effectiveness/Viral Interference (NE/VI) and Cytotoxicity (CT) Controls

Dilution*	PreVasive Botanical Disinfectant	
	Lot No. 211721	
	NE/VI	CT
10^{-1}	T/4	T/4
10^{-2}	T/4	T/4
10^{-3}	4/4	0/4

TEST SUBSTANCE EVALUATION CRITERIA

According to the US Environmental Protection Agency, the test substance passes the test if the following criteria are met:

- The test substance must demonstrate a ≥ 3 Log_{10} reduction on each test carrier in the presence or absence of cytotoxicity, taking into account the level of neutralization when the minimum recoverable viral titer is ≥ 4.80 Log_{10} per test carrier.
- If cytotoxicity is present, the virus control titer should be increased to demonstrate a ≥ 3 Log_{10} reduction in viral titer on each test carrier beyond the cytotoxic level and taking into account the level of neutralization.

CONCLUSIONS

When tested as described, PreVasive Botanical Disinfectant, Lot Nos. 211721 and 011721 passed the Virucidal Hard-Surface Efficacy Test when Porcine Reproductive and Respiratory Syndrome Virus (PRRSV), containing 5.0% Fetal Bovine Serum, was exposed to the test substance for 2 minutes 0 seconds at 22°C and 25% RH.

All controls met the criteria for a valid test. These conclusions are based on observed data.

PRRSV BAC AG 25 B MINIMAL RISK)) PreVasive Botanical Disinfectant and Cleaner

RESULTS (continued)

Table 2
Test Substance

Dilution*	PreVasive Botanical Disinfectant	
	Lot No. 211721	Lot No. 011721
10^{-1}	T/4	T/4
10^{-2}	T/4	T/4
10^{-3}	0/4	0/4
10^{-4}	0/4	0/4
10^{-5}	0/4	0/4
10^{-6}	0/4	0/4
Titer (Log_{10} $TCID_{50}$/mL)	≤ 3.50	≤ 3.50
Load (Log_{10} $TCID_{50}$)	≤ 3.08**	≤ 3.10***
Log_{10} Reduction per carrier	≥ 3.27	≥ 3.25
Log_{10} Reduction per mL	≥ 3.25	≥ 3.25

*Dilution refers to the fold of dilution from the virus inoculum.
**0.38 mL of Undilute [10^0]
***0.40 mL of Undilute [10^0]

Table 3
Neutralizer Effectiveness/Viral Interference (NE/VI) and Cytotoxicity (CT) Controls

Dilution*	PreVasive Botanical Disinfectant	
	Lot No. 211721	
	NE/VI	CT
10^{-1}	T/4	T/4
10^{-2}	T/4	T/4
10^{-3}	4/4	0/4

CONCLUSIONS

When tested as described, PreVasive Botanical Disinfectant Lot No. 011721 and Lot No. 211721 passed the AOAC Use Dilution Test Additional Organism when *Avibacterium paragallinarum*, containing 5.0% Heat-inactivated Fetal Bovine Serum, was exposed to the test substance. Conclusions for each lot are based on the following:

Test Substance	PreVasive Botanical Disinfectant	
Lot No.	011721	211721
Contact Temperature	20°C	
Laboratory Conditions	20°C 25.7-26.7%RH	
Contact Time	2 minutes	
Avibacterium paragallinarum, ATCC 29545	0/10	0/10

The controls met the criteria established for a valid test. These conclusions are based on observed data.

CORYZA *Avibacterium paragallinarum*(BAC AG 25 B MINIMAL RISK) PreVasive Botanical Disinfectant and Cleaner

CONCLUSIONS

When tested as described, PreVasive Botanical Disinfectant Lot No. 011721 and Lot No. 211721 passed the AOAC Use Dilution Test Additional Organism when *Ornithobacterium rhinotracheale*, containing 5.0% Heat-inactivated Fetal Bovine Serum, was exposed to the test substance. Conclusions for each lot are based on the following:

Test Substance	PreVasive Botanical Disinfectant	
Lot No.	011721	211721
Contact Temperature	20°C	
Laboratory Conditions	20°C 28.0-29.2%RH	
Contact Time	2 minutes	
Ornithobacterium rhinotracheale, ATCC 51463	0/10	0/10

The controls met the criteria established for a valid test. These conclusions are based on observed data.

***ORT, Ornithobacterium rhinotracheale* (BAC AG 25 B MINIMAL RISK) PreVasive Botanical Disinfectant and Cleaner**

PreVasive USA
WWW.PreVasive.Com
Jerry bond
Industrial Hygiene Director
Founder (404) 867-2120
Dr. Brian Broshdahl
CEO
Dr. Hal Haines
Chief Science Officer
Public Health