VEXALL Ultimate Protection®

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ANTIMICROBIAL & BIOSTATIC SERVICES

Lab Results Confirming Efficacy of Ultimate Protection®

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Microbac Laboratories, Inc.
VENICE DIVISION
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VENICE, FL 34285
(941) 484-6508 FAX (941) 484-7388

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CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · CONSUMER PRODUCTS
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CERTIFICATE OF ANALYSIS

Ultimate Protection

Date Reported
Date Received 2/19/2010
Order Number 1003-00285
Invoice No.
Cust # I080
Sample Date
Sample Time 0:00

Permit No.
Cust P.O.

Subject: Heterotrophic Plate Count

Test	Method	Result	Units	Date	Time	Tech
009 E.coli - UP - Day 21						
Heterotrophic Plate Count	SM 9215 B	<10	/filter	3/31/2010	9:30	JPL
010 E.coli - Initial - Day 45						
Heterotrophic Plate Count	SM 9215 B	700,000	/filter	4/26/2010	15:30	JPL
011 E.coli - Control - Day 45						
Heterotrophic Plate Count	SM 9215 B	30	/filter	4/26/2010	15:30	JPL
012 E.coli - UP - Day 45						
Heterotrophic Plate Count	SM 9215 B	<10	/filter	4/26/2010	15:30	JPL

The above reported results meet the standards as set forth by NELAC, unless otherwise noted above. Any questions should be directed to Ken Ford at 941-484-6508.

Qualifier Definitions

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V - Analyte was detected in both the sample and the associated method blank.
Y - The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

A - Absent
P - Present
Z or TNTC - Too Numerous To Count.
Q - Sample held beyond the accepted holding time.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research
FCL=Flowers Chemical Laboratories KNL=KNL Laboratories ENC=ENCO Laboratories TAL=Test America Laboratories

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Ultimate Protection

Date Reported
Date Received 2/19/2010
Order Number 1003-00284
Invoice No.
Cust # I080
Sample Date
Sample Time 0:00

Permit No.
Cust P.O.

Subject: Heterotrophic Plate Count

Test	Method	Result	Units	Date	Time	Tech
001 **MRSA - Initial - Day 1**						
Heterotrophic Plate Count	SM 9215 B	700,000	/filter	3/10/2010	11:30	JPL
002 **MRSA - Control - Day 1**						
Heterotrophic Plate Count	SM 9215 B	12,000	/filter	3/10/2010	11:30	JPL
003 **MRSA - UP - Day 1**						
Heterotrophic Plate Count	SM 9215 B	90	/filter	3/10/2010	11:30	JPL
004 **MRSA - Initial - Day 7**						
Heterotrophic Plate Count	SM 9215 B	280,000	/filter	3/17/2010	14:10	JPL
005 **MRSA- Control - Day 7**						
Heterotrophic Plate Count	SM 9215 B	15,000	/filter	3/17/2010	14:10	JPL
006 **MRSA - UP - Day 7**						
Heterotrophic Plate Count	SM 9215 B	100	/filter	3/17/2010	14:10	JPL
007 **MRSA - Initial - Day 21**						
Heterotrophic Plate Count	SM 9215 B	1,100,000	/filter	3/31/2010	9:30	JPL
008 **MRSA - Control - Day 21**						
Heterotrophic Plate Count	SM 9215 B	12,000	/filter	3/31/2010	9:30	JPL

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Invoice No.
Cust # I080
Sample Date
Sample Time 0:00

Permit No.
Cust P.O.

Subject: Heterotrophic Plate Count

Test	Method	Result	Units	Date	Time	Tech
009 MRSA - UP - Day 21						
Heterotrophic Plate Count	SM 9215 B	350	/filter	3/31/2010	9:30	JPL
010 MRSA - Initial - Day 45						
Heterotrophic Plate Count	SM 9215 B	620,000	/filter	4/26/2010	15:30	JPL
011 MRSA - Control - Day 45						
Heterotrophic Plate Count	SM 9215 B	4,000	/filter	4/26/2010	15:30	JPL
012 MRSA - UP - Day 45						
Heterotrophic Plate Count	SM 9215 B	300	/filter	4/26/2010	15:30	JPL

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Ultimate Protection

Date Reported
Date Received 2/19/2010
Order Number 1003-00283
Invoice No.
Cust # I080
Sample Date
Sample Time 0:00

Permit No.
Cust P.O.

Subject: Heterotrophic Plate Count

Test	Method	Result	Units	Date	Time	Tech
001 **Pseudomonas - Initial - Day 1**						
Heterotrophic Plate Count	SM 9215 B	1,170,000	/filter	3/10/2010	11:30	JPL
002 **Pseudomonas - Control - Day 1**						
Heterotrophic Plate Count	SM 9215 B	140,000	/filter	3/10/2010	11:30	JPL
003 **Pseudomonas - UP - Day 1**						
Heterotrophic Plate Count	SM 9215 B	50	/filter	3/10/2010	11:30	JPL
004 **Pseudomonas - Initial - Day 7**						
Heterotrophic Plate Count	SM 9215 B	2,300,000	/filter	3/17/2010	14:10	JPL
005 **Pseudomonas - Control - Day 7**						
Heterotrophic Plate Count	SM 9215 B	250,000	/filter	3/17/2010	14:10	JPL
006 **Pseudomonas - UP - Day 7**						
Heterotrophic Plate Count	SM 9215 B	70,000	/filter	3/17/2010	14:10	JPL
007 **Pseudomonas - Initial - Day 21**						
Heterotrophic Plate Count	SM 9215 B	1,800,000	/filter	3/31/2010	9:30	JPL
008 **Pseudomonas - Control - Day 21**						
Heterotrophic Plate Count	SM 9215 B	50,000	/filter	3/31/2010	9:30	JPL

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Ultimate Protection

Date Reported	
Date Received	2/19/2010
Order Number	1003-00283
Invoice No.	
Cust #	I080
Sample Date	
Sample Time	0:00

Permit No.
Cust P.O.

Subject: Heterotrophic Plate Count

Test	Method	Result	Units	Date	Time	Tech
009 Pseudomonas - UP - Day 21						
Heterotrophic Plate Count	SM 9215 B	60	/filter	3/31/2010	9:30	JPL
010 Pseudomonas - Initial - Day 45						
Heterotrophic Plate Count	SM 9215 B	1,600,000	/filter	4/26/2010	15:30	JPL
011 Pseudomonas - Control - Day 45						
Heterotrophic Plate Count	SM 9215 B	22,000	/filter	4/26/2010	15:30	JPL
012 Pseudomonas - UP - Day 45						
Heterotrophic Plate Count	SM 9215 B	40	/filter	4/26/2010	15:30	JPL

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Y - The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

A - Absent
P - Present
Z or TNTC - Too Numerous To Count.
Q - Sample held beyond the accepted holding time.

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Ultimate Protection

Date Reported
Date Received 12/21/2009
Order Number 1001-00022
Invoice No.
Cust # I080
Sample Date
Sample Time 0:00

Permit No.
Cust P.O.

Subject: Kill Rate Testing on **UP**

Test	Method	Result	Units	Date	Time	Tech
001 **Initial control - Water**						
Anaerobic Plate Count	SM 9215 B	1,800,000	/drop	1/6/2010	20:00	JPL
002 **1 hour control - Water**						
Anaerobic Plate Count	SM 9215 B	2,000,000	/drop	1/6/2010	20:00	JPL
003 **1 hour UP - 20% Solution**						
Anaerobic Plate Count	SM 9215 B	230,000	/drop	1/6/2010	20:00	JPL
The 88.5% reduction in the bacterial level represents a 1 Log Kill.						
004 **12 hour Control - Water**						
Anaerobic Plate Count	SM 9215 B	1,900,000	/drop	1/6/2010	20:00	JPL
005 **12 hour UP - 20% Solution**						
Anaerobic Plate Count	SM 9215 B	<100	/drop	1/6/2010	20:00	JPL
The >99.95% reduction in the bacterial level represents a >4 Log Kill.						
006 **24 hour Control - Water**						
Anaerobic Plate Count	SM 9215 B	1,800,000	/drop	1/6/2010	20:00	JPL
007 **24 hour UP - 20% Solution**						
Anaerobic Plate Count	SM 9215 B	<100	/drop	1/6/2010	20:00	JPL

Test on Fabrics

REDUCTION/INHIBITION PERCENTAGE RESULTS FOR APPLICATION OF Ultimate Protection ON THE FOLLOWING TEXTILE SAMPLES AGAINST *STAPHYLOCOCCUS AUREUS& KLEBSIELLA PNEUMONIAE*

REFERENCED METHODS:
AATCC Test Method 100 - 1993

Introduction:
Indusco provided two fabrics (400 Sateen uniform textile material in Lilac & Pewter Color) to be treated with Ultimate Protection and tested for bio-efficacy at 0 wash, 25 wash & 50 wash: The 400 Sateen treated & untreated control. The treated fabrics are claimed to have biocidal activity. The fabrics were challenged with Staphylococcus aureus, and Klebsiella pneumoniae using the standardized method AATCC 100.

Test article: 400 Sateen in Lilac & Pewter Color Uniform Fabric
Report Date: Oct. 21, 2009

Samples:
1) 400 Sateen Lilac Color Control Sample.
2) 400 Sateen Pewter Color Control
3) 400 Sateen Lilac Color Treated - 0 wash, 25 wash & 50 wash
4) 400 Sateen Pewter Color - 0 wash, 25 wash & 50 wash

Sample Size: 48mm circle
Number of Layer (s): 2
Time of Contact: 24 hours
Contact Temperature: 23^{o} C
Date Contact Initiated: Oct.12, 2009
Incubation Temperature: 37^{o} C
Incubation Time: 24 hours
Date of Plating: Oct. 13, 2009

Test Organism:
Staphylococcus aureus
Klebsiella pneumoniae

	Initial Inoculum
	$1.60x10^{6}$ CFU/ml
	$8.90x\ 10^{5}$ CFU/ml

RESULTS:

Staphylococcus aureus

Sample 1	CFU/ml after 24 hr Contact Time	% Reduction	% Inhibition
Sateen Lilac Untreated	**$2.30x10^9$**	**N/R**	**NI**
Sateen Lilac Treated-0Wash	**<100**	**99.99%**	**99.99%**
Sateen Lilac Treated- 25 wash	**$2.90x10^2$**	**99.98%**	**99.98%**
Sateen Lilac Treated- 50wash	**$4.90x10^2$**	**99.97%**	**99.97%**
SAMPLE 2			
Sateen Pewter Untreated	**$3.40x10^9$**	**NR**	**NI**
Sateen Pewter Treated-0wash	**<100**	**99.99%**	**99.99%**
Sateen Pewter Treated-25wash	**$4.70x10^2$**	**99.97%**	**99.97%**
Sateen PewterTreated-50wash	**$3.20x10^3$**	**99.80%**	**99.80%**

'ebsiella pneumoniae

SAMPLE 1	CFU/ml after 24 hr Contact Time	% Reduction	% Inhibition
Sateen Lilac Untreated	**$3.30x10^8$**	**N/R**	**NI**
Sateen Lilac Treated-0Wash	**<100**	**99.99%**	**99.99%**
Sateen Lilac Treated- 25 wash	**$2.60x10^2$**	**99.97%**	**99.97%**
Sateen Lilac Treated- 50wash	**$4.90x10^2$**	**99.94%**	**99.94%**
SAMPLE 2			
Sateen Pewter Untreated	**$2.90x10^8$**	**N/R**	**NI**
Sateen Pewter Treated-0Wash	**<100**	**99.99%**	**99.99%**
Sateen Pewter Treated- 25 wash	**$3.50x10^2$**	**99.96%**	**99.96%**
Sateen Pewter Treated- 50wash	**$5.40x10^2$**	**99.94%**	**99.94%**

R-No Reduction **NI-** No Inhibition

The overnight culture contained a concentration of $2.20x10^8$ CFU/ml and was diluted 1:100 for application to the substrate of 1ml at an estimated $1.84x10^6$ CFU/ml.

The following formulas were used to calculate the percent reduction:
Percent Reduction (R) = [(A-B) / A] x 100

Where:
A = Population of bacteria/fungi recovered from untreated samples after 24 hrs of contact
B = Population of bacteria/fungi recovered from treated samples after 24 hrs of contact

NOTE: Subsequent testing has revealed positive kill above 99.9% after 200 wash cycles.

DETERMINING THE ANITMICROBIAL ACTIVITY OF A BOUND OR INCORPORATED ANTIMICROBIAL AGENT(S) IN POLYMERIC OR HYDROPHOBIC MATERIALS

REFERENCED METHODS:
AATCC 100

Test Article: Cotton fabric

Samples: Untreated Cotton
Cotton treated with 0.7% per weight Ultimate Protection

Sample Size: 48 mm diameter circle
Number of Layer: 2
Time of Contact: 24 hours
Incubation Temperature: 23°C for fungi, 37°C for bacteria
Incubation Time: 48 hours

Test Organisms:	Initial Inoculum
Staphylococcus aureus	5×10^{7} CFU/ml
Klebsiella pneumoniae	5×10^{6} CFU/ml
Aspergillus niger	5×10^{5} CFU/ml

RESULTS:

Staphylococcus aureus

Sample	24 hrs Contact Time	% Reduction	% Inhibition
Untreated Control	**2.3×10^{7}**	**-**	**-**
Treated	**1.5×10^{4}**	**99.93%**	**99.97%**

Klebsiella pneumoniae

Sample	24 hrs Contact Time	% Reduction	% Inhibition
Untreated Control	**2.0×10^{8}**	**-**	**-**
Treated	**1.0×10^{4}**	**99.95%**	**99.96%**

Aspergillus niger

Sample	48 hrs Contact Time	% Reduction	% Inhibition
Untreated Control	**1.3×10^{5}**	**-**	**-**
Treated	**NC**	**99.99%**	**99.99%**

The following formulas were used to calculate the percent of reduction and inhibition:

Percent of Reduction = (A-B) / A x 100

Percent of Inhibition = (C-B) / C x 100

Where:

A = Population of bacteria/fungi recovered from Untreated samples after 24 hrs of contact

B = Population of bacteria/fungi recovered from Treated samples after 24 hrs of contact

C = Population of bacteria/fungi in 1 mL of initial inoculum

Notes:

NR = No Reduction

NI = No Inhibition

Date completed _____ Approved By _____

Translation Services USA LLC
545 Eighth Avenue, 12th Floor, New York, New York10018
Phone 800 790-3680, Fax 212 537-6674

Translated from Turkish

Test Results vs H1N1

REPUBLIC of TURKEY
ISTANBUL UNIVERSITY
ISTANBUL FACULTY of MEDICINE
Department of Virology and Basic Immunology

Number: 307
Subject: Anti-viral activity report

Istanbul, 24th September 2009

To whom it may concern:

The report, related to the studies performed in our laboratory regarding the anti-viral activity of Ultimate Protection may kindly be found in the attachments.

For your kind attention.

Yours sincerely,

Prof. Dr. Selim BADUR
Istanbul Faculty of Medicine
Department of Virology and Basic Immunology
Academic Member

[Illegible Signature]

RESULTS OF the TEST PERFORMED in ACCORDANCE with RULES OF "Virus Killing Quantitative Suspension Experiment for Chemical Disinfectants and Antiseptics Used in Medicine" belonging to TURKISH STANDARDS INSTITUTION (TSE) with the number TS EN 14476 (March 2007)

Tested product: Ultimate Protection

Virus used for the test: Influenza A (H1N1) Brisbane Strain

Date of report: 24th September 2009

A. TEST LABORATORY

Istanbul University,
Istanbul Faculty of Medicine, Department of Virology and Basic Immunology
Influenza Reference Laboratory
Capa, 34390, Istanbul
Phone: (212) 635 2882

B. SAMPLE DEFINITION

1. Name of tested product: Ultimate Protection
2. Lot number: 06083524
3. Date of expiry: 06/2010
4. Producing company
5. Date of production: 06/08
6. Storage conditions: Room temperature
7. Form of product: Liquid

C. TEST ENVIRONMENT

1. Test request date: 08/25/2009
2. Temperature of test environment: Room temperature (20°C)

3. Virus titration method: Dilution
4. Concentration at which the disinfectant tested: 80%
5. Contact time of disinfectant and influenza A/H1N1: 10 minutes and 60 minutes
6. Special environmental conditions: PBS (clean environment without any organic debris), 0.3% BSA, 0.3% washed sheep erythrocytes (in order to create a dirty environment with organic debris)
7. Test environment: MDCK cell culture
8. Dilution buffer: Sterile distilled water

D. SUMMARY of METHOD

MDCK cells: Confluent MDCK cells were used for production of virus and to perform the experiment.

Detection of Virus Titration: Influenza A/H1N1 virus was inoculated after serial dilutions and the virus titer was detected based on the virus dilution which caused a clear cytopathic effect that can be visible in an invert microscope.

Detection of Sub-Cytotoxic Concentration of Disinfectant: The concentration of disinfectant recommended by the producer was serially diluted and the concentration which has no toxic effect in cell culture was determined and used in the experiment.

Controls: As negative controls, confluent MDCK cells having neither viral inoculation nor addition of disinfectant as well as virus titration control and controls containing also toxic levels of disinfectant were used.

Clean Environment: Environment containing no organic debris.

Dirty Environment: Environment containing organic debris.

E. TEST VALIDATION

1. Virus titer: log 7.8 $TCID_{50}$/100µl influenza A (H1N1) Brisbane strain
2. Toxicity experiment: Effects of 10 times serially diluted disinfectant in MDCK cell culture
3. Formaldehyde: 1.4% formaldehyde

F. TEST RESULTS

Virus titer before application: 7.8	**Effect of Ultimate Protection (80%)**	
	10 minutes	60 minutes
Virus titer after application*	≤2.8	≤2.1
Decrease in virus titer* (log)	≥5.0	≥5.7

*Logarithmic TCID value of virus in 100µl

G. DECISION

The efficacy of 80% concentrated Ultimate Protection against influenza A (H1N1) has been investigated in accordance with the TS EN 14476 (March 2007) standards of Turkish Standards Institution (TSE) and it has been found that the aforementioned product has decreased the virus titer 5 log when applied for 10 minutes; and 5.7 log when applied for 60 minutes in a clean environment at room temperature (20^{o}C). According to the international standards, a disinfectant must decrease the virus titer 3 log in order to conclude that it is an efficient disinfectant. The results of this experiment indicate that Ultimate Protection is an EFFICIENT SURFACE DISINFECTANT against Influenza A/H1N1.

H. SIGNATURE

Meral Akcay Ciblak, DVM, MS
Chief of Laboratory

[Illegible Signature]

Prof. Dr. Selim Badur
Department of Virology and Basic Immunology Academic Member

[Illegible Signature]

Test Results – For UP Treated Fabric

Table I:
Results
Minimum Inhibitory Concentration Test
ULTIMATE PROTECTION Antimicrobial

Test Organism	MIC1
Streptococcus faecalis Gram (+) Bacteria	10
Escherichia coli Gram (-) Bacteria	100
Pseudomonas aeruginose Gram (-) bacteria	100
Aspirgillus niger Fungus	1000

1. micrograms per milliliter

Table II:
Results
AATCC Method 100, Antimicrobials on Fabrics
ULTIMATE PROTECTION Antimicrobial Treated Nonwovens

Sample	**Microorganism**	**% Reduction**
Untreated Control	Staphylococcus aureus, Gram (+) Bacteria	16
UP Treated	Staphylococcus aureus, Gram (+) Bacteria	100
Untreated Control	Escherichia coli, Gram (-) Bacteria	0
UP Treated	Escherichia coli, Gram (-) Bacteria	99.6
Untreated Control	Klebsiella pneumoniae, Gram (-) Bacteria	0
UP Treated	Klebsiella pneumoniae, Gram (-) Bacteria	99.9
Untreated Control	Pseudomonas aeruginosa, Gram (-) Bacteria	0
UP Treated	Pseudomonas aeruginosa, Gram (-) Bacteria	98.6
Untreated Control	Saccharomyces cerevisiae, Yeast	0
UP Treated	Saccharomyces cerevisiae, Yeast	100
Untreated Control	Candida albicans, Yeast	0
UP Treated	Candida albicans, Yeast	99.9

Table III:
Results
AATCC Method 30 Fungicides Evaluation on Textiles
Ultimate Protection Antimicrobial Treated Nonwovens

Sample	% covered1 in 3 days	% covered1 in 5 days	% covered1 in 7 days
Untreated	20	60	100
Treated, Level A	0	5	20
Treated, Level C	0	0	0

1. Aspergillus Niger

Table IV: Results
Clinical Isolate Control
Ultimate Protection Antimicrobial Treated Goods

Sample	Microorganism	% Reduction
Untreated Control	Citerobacter diversus, Wound Isolate	14.3
UP Treated	Citerobacter diversus, Wound Isolate	93.6
Innoculum	Citerobacter diversus, Wound Isolate	0
Untreated Control	Pseudomonas aeruginosa, Urine Isolate	28.3
UP Treated	Pseudomonas aeruginosa, Urine Isolate	99.9
Innoculum	Pseudomonas aeruginosa, Urine Isolate	0
Untreated Control	Staphylococcus aureus, Wound Isolate	0
UP Treated	Staphylococcus aureus, Wound Isolate	99.7
Innoculum	Staphylococcus aureus, Wound Isolate	0
Untreated Control	Escherichia coli, Urine Isolate	11.6
UP Treated	Escherichia coli, Urine Isolate	98.6
Innoculum	Escherichia coli, Urine Isolate	0
Untreated Control	Proteuse mirabilis, Wound Isolate	0
UP Treated	Proteuse mirabilis, Wound Isolate	99.5

Innoculum	Proteuse mirabilis, Wound Isolate	0

Table V:
Results
Fluid Compatibility Tests
Ultimate Protection Antimicrobial Treated ISO-BAC Fabric
Percent Reduction1 with 15 minute Contact

Sample	Buffered Phosphate	Saline	Serum
Untreated Linen	8	0	0
Untreated Nonwoven	0	0	0
Treated Nonwoven	99+	90+	90+

1. Klebsiella pneumoniae

Table VI:
Results
Bacterial Adaptation Studies
Ultimate Protection Treated Fabrics

Sample	% reduced in 1 day	% reduced in 2 days	% reduced in 3 days	% reduced in 4 days	% reduced in 5 days
Untreated Exposed1	0	0	0	0	0
Treated Exposed1	99+	99+	99	98	99+
Untreated Exposed2	0	0	0	0	0
Treated Exposed2	99	98	98	99	99

1. Klebsiella Pneumoniae
2. Staphylococcus aureus

Virucidal against

This product was evaluated at 32 ounces per gallon use level (850 ppm quat active), in the presence of 5% serum and 400 ppm hard water found to be effective against the following viruses on hard and porous environmental surfaces.

(Testing is performed per EPA Guidance (DIS/TSS-7). Two separate lots are tested. Inactivation of virus must be demonstrated at all dilutions when no cytotoxicity is observed or at all dilutions above the cytotoxic level when it is observed. The data must demonstrate a 3-log reduction in viral titer for both lots (3 lots for Canada))

	Dried Virus Control;	**Sample**	**Result**	**Log Reduction**
Avian influenza /Turkey/Wisconsin ATCC VR-798	6.0 Log_{10}	A	≤1.5 Log_{10}	≥4.5 Log_{10}
		B	≤1.5 Log_{10}	≥4.5 Log_{10}
Canine Coronavirus ATCC VR-809	4.75 Log_{10}	A	≤1.5 Log_{10}	≥3.25 Log_{10}
		B	≤0.5 Log_{10}	≥4.25 Log_{10}
Canine Distemper	5.0 Log_{10}	A	≤1.5 Log_{10}	≥3.5 Log_{10}
		B	≤1.5 Log_{10}	≥3.5 Log_{10}
Hantavirus	5.75 Log_{10}	A	≤0.5 Log_{10}	≥5.25 Log_{10}
		B	≤0.5 Log_{10}	≥5.25 Log_{10}
Hepatitis B Virus	5.5 Log_{10}	A	≤1.5 Log_{10}	≥4.0 Log_{10}
	5.5 Log_{10}	B	≤1.5 Log_{10}	≥4.5 Log_{10}
	4.5 Log_{10}	Confirmatory A	≤1.5 Log_{10}	≥3.0 Log_{10}
Hepatitis C Virus ATCC CCL-22	6.84 Log_{10}	A	≤1.51 Log_{10}	≥5.33 Log_{10}
	6.84 Log_{10}	B	≤1.51 Log_{10}	≥5.33 Log_{10}
	7.14 Log_{10}	Confirmatory B	≤1.7 Log_{10}	≥5.44 Log_{10}
Herpes Simplex Type1 ATCC VR-260	5.0 Log_{10}	A	≤1.8 Log_{10}	≥3.2 Log_{10}
		B	≤1.8 Log_{10}	≥3.2 Log_{10}
Herpes Simplex Type 2 ATCC VR-734	5.0 Log_{10}	A	≤0.5 Log_{10}	≥4.5 Log_{10}
		B	≤0.5 Log_{10}	≥4.5 Log_{10}
Human Coronavirus ATCC VR-740	4.75 Log_{10}	A	≤1.5 Log_{10}	≥3.25 Log_{10}
		B	≤1.5 Log_{10}	≥3.25 Log_{10}
Human Immunodeficiency Virus type 1 (HIV 1) HTLV-III_{RF}	5.0 Log_{10}	A	≤1.5 Log_{10}	≥3.5 Log_{10}
		B	≤1.5 Log_{10}	≥3.5 Log_{10}
Influenza A/Brazil Virus	6.0 Log_{10}	A	≤1.8 Log_{10}	≥4.2 Log_{10}
		B	≤1.8 Log_{10}	≥4.2 Log_{10}
Infectious Bovine Rhinotracheitis virus (IBR) ATCC VR-188	5.0 Log_{10}	A	≤1.5 Log_{10}	≥3.5 Log_{10}
		B	≤1.5 Log_{10}	≥3.5 Log_{10}
Newcastle disease virus ATCC VR-109	6.3 Log_{10}	A	≤1.5 Log_{10}	≥4.8 Log_{10}
	5.8 Log_{10}	B	≤1.5 Log_{10}	≥4.3 Log_{10}
Porcine Respiratory & Reproductive (PRRSV) Strain NVSL	5.5 Log_{10}	A	≤1.5 Log_{10}	≥4.0 Log_{10}
		B	≤1.5 Log_{10}	≥4.0 Log_{10}

Porcine Rotavirus ATCC VR-893	4.5 Log_{10}	A	≤1.5 Log_{10}	≥3.0 Log_{10}
		B	≤1.5 Log_{10}	≥3.0 Log_{10}
Pseudorabies virus ATCC VR-135	4.5Log_{10}	A	≤1.5 Log_{10}	≥3.0 Log_{10}
		B	≤1.5 Log_{10}	≥3.0 Log_{10}
Transmissible Gastroenteritis (TGE) ATCC VR-742	5.7Log_{10}	A	≤2.5 Log_{10}	≥3.2 Log_{10}
		B	≤2.5 Log_{10}	≥3.2 Log_{10}
Vaccinia virus	5.8 Log_{10}	A	≤2.5 Log_{10}	≥3.3 Log_{10}
		B	≤2.5 Log_{10}	≥3.3 Log_{10}