Asept.2X Gold – Mobile UV Rapid Disinfector

The ASEPT.2X Mobile UV is a mobile rapid disinfector that provides operator initiated closed room UVC disinfection.

Placement of 1-2 units within the room to be disinfected, allows for simultaneous sterilization of a room from all angles, minimizing the problematic shadow areas left by the conventional single unit UV sterilizers.

User-friendly remote Wi-Fi controls which can be used on any smart device.

The ASEPT.2X units used in pairs simultaneously will sterilize up to 99.9999% of a 22’ x 22’ room (7mx7m) in 10 minutes. Shorter cycle of disinfection (5) minutes will apply for smaller room dimensions.

View product video at: https://www.youtube.com/watch?v=VafgVMJa0YY&t=27s

Specifications

Disinfection Time	5-10 min per room
Safety System	4 passive infrared sensors, E-stop
Power Requirements	120-240V AC, 50-60Hz, 7.5A per tower
Overall Dimensions	712 mm W x 712 mm L x 1645 mm H (28.0" W x 28.0" L x 64.8" H)
Weight	45.5 kg (100lbs)
Communication	Wi-Fi
UV Wavelength	254 nm

Features/Deliverables

- UVC lamps (8): T6 quartz 40 in (101.6 cm) Teflon encapsulated, mercury vapour
- Aluminum construction and medical grade stainless steel
- Multiple infrared motion detectors
- Fan-based lamp temperature management
- 360^{o} handle for easy maneuverability
- Heavy-duty lockable swivel casters
- Retractable medical grade cord
- Scalable software with updates
- Chronological data collection
- Integrated WEB server
- User-friendly WEB interface (user/administrator), upgradable and customizable

Benefits

- Automated disinfection with minimal human intervention
- Simultaneous operation of a single unit for quicker disinfection
- 99.99% disinfection in 5 minutes
- Adjustable disinfection time
- Paired units to maximize disinfection dose and time

Pricing

Item	Description	Qty	Price (USD)
1	ASEPT.2X Includes: 1 tower, Android 7in tablet configured for use, Caution floor sign/coupler and (2) door caution panels	1	
2	UVC LED Floor Disinfection Module	1	Upon Request
Optional Accessories			
3	uv|cense Dosimeter (UVC254)	1	
4	Intelligo UVC Indicators - pkg of 100		
	0-100 mJ/cm^2	1	
	0-1000 mJ/cm^2	1	
	Safety Indicators (0-6 mJ/cm^2)	1	
5	Aranet4 Pro Air Quality Monitor	1	

Terms and Conditions

Terms:	50% with Purchase Order 30% at Shipping 20% Net 30
Warranty:	All parts are warranted against manufacturer's defects for a period of 12 months from date of installation, not including wear and tear parts.
Taxes:	All taxes extra
F.O.B.	Prescient^{x} Warehouse – Cambridge, Ontario, Canada
Returns:	Stock Items: RGA Required; Restocking Charge Applies; Non-Stock Items: No Returns
Manufactured Items:	Cancellation of orders will result in a 10% penalty through submittal stage. After approved submittals 20% penalty until manufacturing begins. After manufacturing begins, cancellations will not be permitted.
Prices:	Quotation valid for 90 days.

Sanuvox EPA

United States
OMB Control No. 2070-0078
Expires on 1/31/2020

ENVIRONMENTAL PROTECTION AGENCY

Washington, DC 20460

Pesticide Report for Pesticide-Producing and Device-Producing Establishments

Office of Enforcement and Compliance Assurance

Section 7, Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. sec. 136e)

http://www.epa.gov/compliance/pesticide-establishment-registration-and-reporting

1. Establishment Name: SANUVOX TECHNOLOGIES INC.			2. EPA Est. No.: 91660-CAN-1
3. Establishment Site Address: 146 BARR			
4. City: SAINT LAURENT			5. State:
6. Province/Region: QUEBEC PROVINCE	7. Country: CAN	8. Zip/Postal Code: H4T 1Y4	
9. Establishment Mailing Address: ATTN: KEITH JORDAN, 12725 Outlook Ave			
10. City: FORT WORTH			11. State: TX
12. Province/Region:	13. Country: USA	14. Zip/Postal Code: 76244	
15. Telephone Number: 8887268869	16. Email: mec@sanuvox.com		
17. **Check if your establishment's name or address changed** [X]	18. **Did you produce or distribute in 2019?** [X] **Yes** [ ] **No**		
19. Company Name: SANUVOX TECHNOLOGIES INC.			
20. Company Site Address: 12725 Outlook Ave			
21. City: Forth Worth			22. State: TX
23. Province/Region: QUEBEC PROVINCE	24 Country: USA	25. Zip/Postal Code: 76244	
26. Company Mailing Address: 12725 Outlook Ave			
27. City: Forth Worth			28. State: TX
29. Province/Region:	30. Country: USA	31. Zip/Postal Code: 76244	
32. Telephone Number: (817) 938-6843	33. Email: kjordan@sanuvox.com		
34. **Check if your company name or address changed** [ ]	35. **Check if your Authorized Agent changed** [ ]		
36. Name of Company Official or Authorized Agent: Vincent Gariepy		37. Title of Company Official or Authorized Agent: Authorized Agent	
38. Signature of Company Official or Authorized Agent (Original signature required): _aa2a03a4-4ae7-434b-8fa4-6343bb1b29cf			39. Date: 02/27/2020
40. Telephone Number of Company Official or Authorized Agent: 5143825823		41. Email Of Company Official or Authorized Agent: mec@sanuvox.com	

EPA Reviewer	EPA Office	Post Mark Date	Date Entered	Comments	Reporting Year **2019**

EPA Form 3540-16 (Rev. 11/19) Previous versions are obsolete. 1

ASEPT.2X CE/EC Certificate of Conformity

SANUVOX

CE EC Certificate of Conformity

Date of issue: 2017-01-09

Sanuvox Technologies Inc. hereby declares that testing has been completed and report has been generated for:

Product Name	:	**ASEPT.2X Mobile Sterilization Unit**
Model Number	:	**ASEPT.2X**
Applicant	:	**Sanuvox Technologies Inc.**
		146 Barr
		St-Laurent, QC H4T 1Y4
		Canada

And, in accordance to the following applicable Directive:

2014/35/EC, 2011/65/EU, 2014/30/EU

That this product has been tested according to the following Standard:

EN 61010-1:2010, EN55011:2009+A1:2010 Class B, Group 1,
IEC/EN 60598-2-1 (ballast), IEC/EN 61347-2-3 (ballast)

Therefore, Sanuvox Technologies Inc. hereby acknowledges that the manufacturer may issue a DECLARATION OF CONFORMITY and apply the CE mark in accordance to European Union Rules

Approved by: Benoit Despatis, P. Eng

Benoit Despatis, P.Eng — Signature

2017-01-09 — Date

The statement is based on a single evaluation of one sample of the above product.

ATS LABS

STUDY REPORT

STUDY TITLE

Evaluation of Antimicrobial Effectiveness of a UVC Generating Device on Hard Nonporous Surfaces

Test Organisms:

Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)
Clostridium difficile - spore form (ATCC 43598)
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)

PRODUCT IDENTITY

Aseptix

AUTHOR

Joshua Luedtke, M.S.
Study Director

STUDY COMPLETION DATE

January 17, 2014

PERFORMING LABORATORY

ATS Labs
1285 Corporate Center Drive, Suite 110
Eagan, MN 55121

SPONSOR

Sanuvox Technologies Inc.
146, rue Barr
Saint-Laurent, QC H4T 1Y4
Canada

PROJECT NUMBER

A15984

1285 Corporate Center Drive, Suite 110 • Eagan, MN 55121 • 877.287.8378 • 651.379.5510 • Fax: 651.379.5549

STUDY REPORT

GENERAL STUDY INFORMATION

Study Title: Evaluation of Antimicrobial Effectiveness of a UVC Generating Device on Hard Nonporous Surfaces

Project Number: A15984

TRF Number: SXT01121613.CUST

TEST SUBSTANCE IDENTITY

Test Device Name: Aseptix

STUDY DATES

Date Sample Received: December 27, 2013
Study Initiation Date: December 27, 2013
Experimental Start Date: January 8, 2014
Experimental End Date: January 13, 2014
Study Completion Date: January 17, 2014

Test Organism	ATCC #	Culture Medium	Incubation Parameters
Methicillin Resistant *Staphylococcus aureus* - MRSA	33592	Synthetic Broth	35-37°C, aerobic
Clostridium difficile - spore form	43598	CDC Anaerobic Blood Agar	35-37°C, anaerobic
Vancomycin Resistant *Enterococcus faecalis* – VRE	51575	Fluid Thioglycollate Medium	35-37°C, aerobic

The test organisms to be used in this study were obtained from the American Type Culture Collection (ATCC), Manassas, Virginia.

Exposure Times: 5 minutes, 10 minutes and 15 minutes

Exposure Temperature: Room temperature (20.3°C)

Number of Carriers Tested: 2 per organism per location

Soil Load Description: No organic soil load required

Neutralizer: Letheen Broth

Agar Plate Medium: Tryptic Soy Agar with 5% Sheep Blood (BAP) [for MRSA and VRE]
BHI-HT Agar [for *Clostridium difficile* – spore form]

EXPERIMENTAL DESIGN

Glass carriers (1" x 3") inoculated with a dry film of the test organism were placed into the testing room and exposed to the UV generating device(s) for the Sponsor specified exposure times. Duplicate carriers per organism per location were placed around the testing area as indicated by the Sponsor. Briefly, two carriers per organism were placed on the bedrail of a hospital bed approximately 3 feet off the floor and approximately 2 feet from a UV device. The second set of carriers was located on the opposite side of the hospital bed, on a hospital table approximately 4 feet off the ground and approximately 5 feet from a UV device. Each test carrier was oriented so that the inoculated area of the carrier was perpendicular to the ground, parallel to the device and as vertical as possible. After exposure, the carriers were transferred to vessels containing subculture media and assayed for survivors. Appropriate culture purity, media sterility, carrier sterility, carrier quantitation, HCl resistance (for *Clostridium difficile*) and neutralization confirmation controls were performed.

Per Sponsor's direction, the study was not required to be conducted under US EPA 40 CFR Part 160 or US FDA 21 CFR Part 58.

STUDY RESULTS

TABLE 1: CONTROL RESULTS

The following results from controls confirmed study validity:

Type of Control	Results		
	Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	***Clostridium difficile* - spore form (ATCC 43598)**	**Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)**
Purity Control	Pure	Pure	Pure
Neutralizer Sterility Control	No Growth		
Carrier Sterility Control	No Growth		

TABLE 2: NEUTRALIZATION CONFIRMATION CONTROL RESULTS

Test Device	Test Organism	Neutralization Confirmation (CFU/plate)		±1.0 Log_{10} Pass/Fail
		Numbers Control	Results	
Aseptix	Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	20,13	21,14	-0.03 (Pass)
	Clostridium difficile - spore form (ATCC 43598)	40,36	40,34	0.01 (Pass)
	Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	17,11	15,15	-0.03 (Pass)

CFU = Colony Forming Unit

TABLE 3: CARRIER QUANTITATION CONTROL RESULTS

Test Organism	Carrier #	Result CFU/Carrier (Log_{10})	Average Log_{10}	Geometric Mean
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	1.5×10^6 (6.18)	6.18	1.51×10^6
	2	1.5×10^6 (6.18)		
Clostridium difficile - spore form (ATCC 43598)	1	9.0×10^6 (6.95)	6.95	8.91×10^6
	2	9.0×10^6 (6.95)		
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	1.7×10^5 (5.23)	5.17	1.48×10^5
	2	1.3×10^5 (5.11)		

CFU = Colony Forming Unit

TABLE 4: EVALUATION OF TEST CARRIER DATA – 5 Minute Exposure

Test Device: Aseptix							
Carrier Location: Bedrail (approximately 3 feet off ground and 2 feet from device)							
Test Organism	**Carrier #**	**Number of Survivors (CFU)**					
		Dilution					
		Filtered 10^0	**10^0 (1.00 mL)**	**10^0**	**10^{-1}**	**10^{-2}**	**10^{-3}**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Clostridium difficile – spore form (ATCC 43598)	1	3	0,0	0,0	0,0	0,0	0,0
	2	52	3,8	0,0	0,0	0,0	0,0
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Carrier Location: Table (approximately 4 feet off ground and 5 feet from device)							
Test Organism	**Carrier #**	**Number of Survivors (CFU)**					
		Dilution					
		Filtered 10^0	**10^0 (1.00 mL)**	**10^0**	**10^{-1}**	**10^{-2}**	**10^{-3}**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Clostridium difficile – spore form (ATCC 43598)	1	TNTC	30,20	3,2	0,0	0,0	0,0
	2	TNTC	46,40	3,9	0,0	0,0	0,0
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	14	1,1	1,0	0,0	0,0	0,0
	2	2	1,0	0,0	0,0	0,0	0,0

CFU = Colony Forming Unit
TNTC = Too Numerous To Count
A value of <1 was used in place of zero for calculation purposes only.

TABLE 5: EVALUATION OF TEST CARRIER DATA – 10 Minute Exposure

Test Device: Aseptix							
Carrier Location: Bedrail (approximately 3 feet off ground and 2 feet from device)							
Test Organism	**Carrier #**	**Number of Survivors (CFU)**					
		Dilution					
		Filtered 10^0	**10^0 (1.00 mL)**	**10^0**	**10^{-1}**	**10^{-2}**	**10^{-3}**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Clostridium difficile – spore form (ATCC 43598)	1	1	0,0	0,0	0,0	0,0	0,0
	2	15	0,0	0,0	0,0	0,0	0,0
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Carrier Location: Table (approximately 4 feet off ground and 5 feet from device)							
Test Organism	**Carrier #**	**Number of Survivors (CFU)**					
		Dilution					
		Filtered 10^0	**10^0 (1.00 mL)**	**10^0**	**10^{-1}**	**10^{-2}**	**10^{-3}**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Clostridium difficile – spore form (ATCC 43598)	1	80	1,8	0,0	0,0	0,0	0,0
	2	52	2,5	0,0	0,0	0,0	0,0
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	39	3,2	0,0	0,0	0,0	0,0
	2	TNTC	36,46	1,0	0,0	0,0	0,0

CFU = Colony Forming Unit
TNTC = Too Numerous To Count
A value of <1 was used in place of zero for calculation purposes only.

TABLE 6: EVALUATION OF TEST CARRIER DATA – 15 Minute Exposure

Test Device: Aseptix							
Carrier Location: Bedrail (approximately 3 feet off ground and 2 feet from device)							
Test Organism	**Carrier #**	**Number of Survivors (CFU)**					
		Dilution					
		Filtered 10^0	**10^0 (1.00 mL)**	**10^0**	**10^{-1}**	**10^{-2}**	**10^{-3}**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Clostridium difficile – spore form (ATCC 43598)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Carrier Location: Table (approximately 4 feet off ground and 5 feet from device)							
Test Organism	**Carrier #**	**Number of Survivors (CFU)**					
		Dilution					
		Filtered 10^0	**10^0 (1.00 mL)**	**10^0**	**10^{-1}**	**10^{-2}**	**10^{-3}**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	0	0,0	0,0	0,0	0,0	0,0
	2	0	0,0	0,0	0,0	0,0	0,0
Clostridium difficile – spore form (ATCC 43598)	1	6	0,0	0,0	0,0	0,0	0,0
	2	18	0,0	0,0	0,0	0,0	0,0
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	0	0,0	0,0	0,0	0,0	0,0
	2	4	0,0	0,0	0,0	0,0	0,0

CFU = Colony Forming Unit
A value of <1 was used in place of zero for calculation purposes only.

1285 Corporate Center Drive, Suite 110 • Eagan, MN 55121 • 877.287.8578 • 651.379.5510 • Fax: 651.379.5549

TABLE 7: CALCULATED VALUES – 5 Minute Exposure

Test Device: Aseptix					
Carrier Location: Bedrail (approximately 3 feet off ground and 2 feet from device)					
Test Organism	**Carrier #**	**# Survivors/ Carrier (Log_{10})**	**Average Log_{10}**	**Geometric Mean**	**Percent Reduction (Log_{10})**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.18)
	2	<1 (<0.00)			
Clostridium difficile - spore form (ATCC 43598)	1	4 (0.60)	1.20	1.58×10^{1}	>99.999% (5.75)
	2	6.2×10^{1} (1.79)			
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	<1 (<0.00)	<0.00	<1	>99.999% (>5.17)
	2	<1 (<0.00)			
Carrier Location: Table (approximately 4 feet off ground and 5 feet from device)					
Test Organism	**Carrier #**	**# Survivors/ Carrier (Log_{10})**	**Average Log_{10}**	**Geometric Mean**	**Percent Reduction (Log_{10})**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.18)
	2	<1 (<0.00)			
Clostridium difficile - spore form (ATCC 43598)	1	5.0×10^{2} (2.70)	2.82	6.60×10^{2}	99.99% (4.13)
	2	8.6×10^{2} (2.93)			
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	1.7×10^{1} (1.23)	0.77	5.89×10^{0}	>99.99% (4.40)
	2	2 (0.30)			

TABLE 8: CALCULATED VALUES – 10 Minute Exposure

Test Device: Aseptix					
Carrier Location: Bedrail (approximately 3 feet off ground and 2 feet from device)					
Test Organism	**Carrier #**	**# Survivors/ Carrier (Log_{10})**	**Average Log_{10}**	**Geometric Mean**	**Percent Reduction (Log_{10})**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.18)
	2	<1 (<0.00)			
Clostridium difficile - spore form (ATCC 43598)	1	1 (0.00)	0.63	4.27×10^{0}	>99.9999% (6.32)
	2	1.8×10^{1} (1.26)			
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	<1 (<0.00)	<0.00	<1	>99.999% (>5.17)
	2	<1 (<0.00)			
Carrier Location: Table (approximately 4 feet off ground and 5 feet from device)					
Test Organism	**Carrier #**	**# Survivors/ Carrier (Log_{10})**	**Average Log_{10}**	**Geometric Mean**	**Percent Reduction (Log_{10})**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.18)
	2	<1 (<0.00)			
Clostridium difficile - spore form (ATCC 43598)	1	9.5×10^{1} (1.98)	1.89	7.76×10^{1}	99.999% (5.06)
	2	6.2×10^{1} (1.79)			
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	4.6×10^{1} (1.66)	2.29	1.95×10^{2}	>99.8% (2.88)
	2	8.2×10^{2} (2.91)			

1285 Corporate Center Drive, Suite 110 • Eagan, MN 55121 • 877.287.8378 • 651.379.5510 • Fax 651.379.5549

TABLE 9: CALCULATED VALUES – 15 Minute Exposure

Test Device: Aseptix					
Carrier Location: Bedrail (approximately 3 feet off ground and 2 feet from device)					
Test Organism	**Carrier #**	**# Survivors/ Carrier (Log_{10})**	**Average Log_{10}**	**Geometric Mean**	**Percent Reduction (Log_{10})**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.18)
	2	<1 (<0.00)			
Clostridium difficile - spore form (ATCC 43598)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.95)
	2	<1 (<0.00)			
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	<1 (<0.00)	<0.00	<1	>99.999% (>5.17)
	2	<1 (<0.00)			
Carrier Location: Table (approximately 4 feet off ground and 5 feet from device)					
Test Organism	**Carrier #**	**# Survivors/ Carrier (Log_{10})**	**Average Log_{10}**	**Geometric Mean**	**Percent Reduction (Log_{10})**
Methicillin Resistant *Staphylococcus aureus* - MRSA (ATCC 33592)	1	<1 (<0.00)	<0.00	<1	>99.9999% (>6.18)
	2	<1 (<0.00)			
Clostridium difficile - spore form (ATCC 43598)	1	7 (0.85)	1.09	1.23×10^{1}	>99.999% (5.86)
	2	2.1×10^{1} (1.32)			
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	1	<1 (<0.00)	<0.35	$<2.24 \times 10^{0}$	>99.99% (>4.82)
	2	5 (0.70)			

1285 Corporate Center Drive, Suite 110 • Eagan, MN 55121 • 877.287.8378 • 651.379.3510 • Fax: 651.379.3549

TABLE 10: VERIFICATION OF ANTIBIOTIC RESISTANCE – *Staphylococcus aureus* - MRSA

Organism (ATCC)	**Zone of Inhibition (mm)**	**CLSI* Resistant Range (mm)**
Methicillin Resistant *Staphylococcus aureus* – MRSA (ATCC 33592)	6	≤ 10
Quality Control Organism (ATCC)	**Zone of Inhibition (mm)**	**CLSI* Acceptable Range (mm)**
Staphylococcus aureus (ATCC 25923)	20	18 - 24

*CLSI = Clinical and Laboratory Standards Institute

TABLE 11: VERIFICATION OF ANTIBIOTIC RESISTANCE – *Enterococcus faecalis* - VRE

Quality Control Organism	**Zone of Inhibition (mm)**	**CLSI* Acceptable Range (mm)**
Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575)	10	≤14
Test Organism	**Zone of Inhibition (mm)**	**CLSI* Resistant Range (mm)**
Staphylococcus aureus (ATCC 25923)	17	17-21

*CLSI = Clinical and Laboratory Standards Institute
Interpretation of result and acceptable range are from the Clinical and Laboratory Standards Institute, Performance Standards for Antimicrobial Susceptibility Testing; Twenty-Second Information Supplement January 2012, Volume 31 Number 1, Approved Standard M02-A11 and M07-A9, Wayne, Pennsylvania.

TABLE 12: HCL RESISTANCE VERIFICATION

Test Organism: *Clostridium difficile* – spore form (ATCC 43598)						
Exposure Time	**10^{-2}**	**10^{-3}**	**10^{-4}**	**CFU/mL (Log_{10})**	**Log_{10} Reduction from Control**	**Pass/Fail (≤ 2 log_{10} difference)**
5 minutes (test)	184,204	27,27	6,1	1.94×10^{5} (5.29)	0.94	Not Applicable
10 minutes (test)	56,58	12,17	4,0	5.7×10^{4} (4.76)	1.47	Pass
20 minutes (test)	4,7	1,3	0,0	6×10^{3} (3.78)	2.45	Not Applicable
20 minutes (control)	T,T	142,200	29,37	1.71×10^{6} (6.23)	Not Applicable	Not Applicable

T = Too Numerous To Count (≥300 colonies)

CONTROL RESULTS

The results of controls run for purity, carrier sterility, neutralizer sterility, neutralization confirmation, HCl resistance control, antibiotic resistance and carrier quantitation were all acceptable.

Project No. A15984
TRF Number: SXT01121613.CUST

Sanuvox Technologies Inc.
Page 13 of 13

ATS LABS

ANALYSIS

The UV light generating device, Aseptix, demonstrated a >99.999% (>5.75 $\log_{10}$) reduction, >99.9999% (6.32 $\log_{10}$) and >99.9999% (>6.95 $\log_{10}$) reduction of *Clostridium difficile* – spore form on the test carriers located on the hospital bedrail following a 5, 10 and 15 minute exposure time, respectively, when tested at room temperature (20.3°C).

The UV light generating device, Aseptix, demonstrated a 99.99% (4.13 $\log_{10}$) reduction, 99.999% (5.06 $\log_{10}$) and >99.999% (5.86 $\log_{10}$) reduction of *Clostridium difficile* – spore form on the test carriers located on the hospital table following a 5, 10 and 15 minute exposure time, respectively, when tested at room temperature (20.3°C).

The UV light generating device, Aseptix, demonstrated a >99.9999% (>6.18 $\log_{10}$) reduction of Methicillin Resistant *Staphylococcus aureus* - MRSA on all test carriers following 5, 10 and 15 minute exposure times when tested at room temperature (20.3°C).

The UV light generating device, Aseptix, demonstrated a >99.999% (>5.17 $\log_{10}$) reduction of Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575) on the test carriers located on the hospital bedrail following 5, 10 and 15 minute exposure times when tested at room temperature (20.3°C).

The UV light generating device, Aseptix, demonstrated a >99.99% (4.40 $\log_{10}$) reduction, >99.8% (2.88 $\log_{10}$) reduction and a >99.99% (>4.82 $\log_{10}$) reduction of Vancomycin Resistant *Enterococcus faecalis* – VRE (ATCC 51575) on the test carriers located on the hospital table following a 5, 10 and 15 minute exposure time, respectively, when tested at room temperature (20.3°C).

PREPARED BY:

Joshua Luedtke, M.S.
Microbiologist

1.17.14
Date

1285 Corporate Center Drive, Suite 110 • Eagan, MN 55121 • 877.287.8378 • 651.379.5510 • Fax: 651.379.5549

ASEPT.2X disinfection efficiency against SARS-CoV-2 virus

SANUVOX
PURIFYING AIR AT THE SPEED OF LIGHT™

Sanuvox Technologies Inc.
146 Barr,
St-Laurent, Qc.,
H4T 1Y4

p. 1.888.726.8869
f. 1.888.582.6475
e. info@sanuvox.com

June 30th 2020,

Object: ASEPT.2X disinfection efficiency against SARS-CoV-2 virus

This letter is to confirm that based on specific test data performed in a P3 level lab, the ASEPT.2X disinfection unit provides at least 99.99% disinfection of SARS-CoV-2 in less than 2 minutes of exposure time within a radius of 3 meters around the unit. This allows a single ASEPT.2X to disinfect a room of 6m x 6m in 2 minutes.

Validations with UVC dosimeter indicators sensitive to 254 nm wavelength has also shown that for a disinfection cycle time of 5 minutes, the reach for the same disinfection level of 4 log extends up to a radius of 5.5 meters. Consequently, all exposed surfaces of a 11 m x 11m room can be effectively disinfected with a 5 minutes operating cycle. All the air inside the room also gets the same disinfection level.

Germicidal UV disinfection uses no chemicals and leaves no harmful residuals behind so that the disinfected room can be accessed immediately after.

For further information, please do not hesitate to email Sanuvox Technologies at www.sanuvox.com

Best regards,

Dr. Normand Brais, *P. Eng, M.A.Sc., Ph.D.*
VP Engineering & Founder