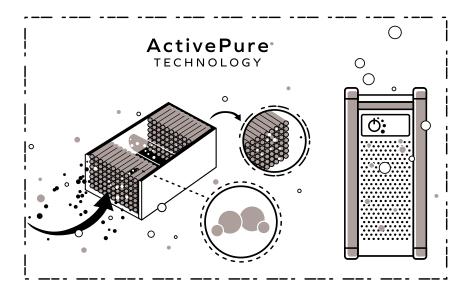
Active Pure® TECHNOLOGY

Aerus Air Filtration Products

General

General Air PRODUCT GUIDE

ActivePure TECHNOLOGY



The science behind this technology is revolutionary. Microscopic oxygen and water molecules in the air enter ActivePure® equipped air purifiers. Water and oxygen are absorbed by the ActivePure® honeycomb matrix. They pass through the ActivePure® honeycomb matrix and transform into friendly-yet-powerful oxidizers. When they're released back into the air, the supercharged ActivePure® molecules seek and rapidly destroy contaminants, fungi, mold and odor-causing bacteria.

How ActivePure® Works

The Most Powerful Surface and Air Disinfection Technology our Patented ActivePure® Technology

ActivePure®'s patented technology utilizes your air to continuously create highly effective oxidizing molecules. These molecules are dispersed and circulated around your space to actively seek out and destroy pathogens as soon as they enter.

Unlike other solutions, ActivePure® is actively working to continuously reduce harmful pathogens on both surfaces and in the air. ActivePure® is one of the only technologies proven effective against both surface and airborne SARS-CoV-2, the virus responsible for COVID-19. Tests were conducted on the actual virus, not a proxy or surrogate. We're also one a only 75 technology that have been inducted into the Space Technology Hall a Fame in the past 30 years!

Dr. Deborah Birx & ActivePure®

Dr. Deborah Birx Joins ActivePure® Technology!

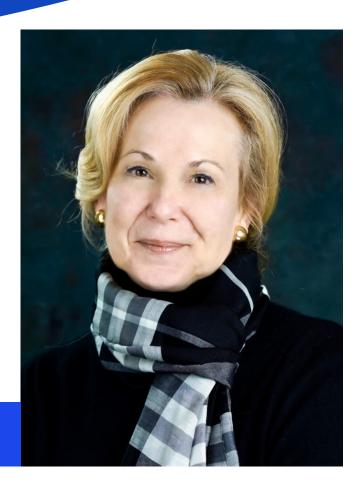
Deborah L. Birx, MD is a world-renowned medical physician and expert on HIV/AIDS and infectious diseases and a diplomat who served as a special representative for global health diplomacy. Most recently, Birx served on the White House Coronavirus Task Force from Feb. 2020 to Jan. 2021.

Dr. Birx recognizes that for America to reopen safely, another layer of protection is needed. She passionately believes that ActivePure® is the solution to reopen American and get us back to work, to school, to restaurants, to events, to life before COVID-19.



Dr. Deborah Birx

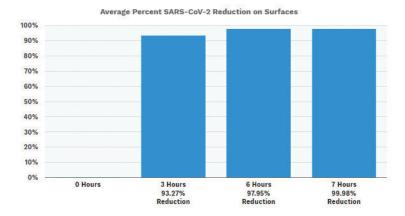
Chief Scientific & Medical Advisor



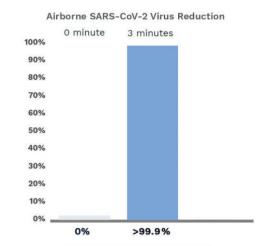
Aerus Hydroxyl Blaster with ActivePure Technology Unit Testing

Testing was done at MRIGlobal, an independent, FDA-Compliant laboratory. The reduction percentages were measured incrementally over natural degradation of SARS-CoV-2. Outside of control group - over 99.9% reduction of the SARS-CoV-2 virus.





Aerus Pure & Clean and Vollara Air & Surface Pro Unit Testing



NEW PURE & CLEAN UNIT TESTING
Testing done at UTMB BSL Level 3 Lab with assistance from BSL Level 4 Lab, complying with EDA protocole in a EDA Certified Compiliant Laboratory.

Scientific Proof

The Only Technology Available in Products Proven to Reduce COVID-19 on Both Surfaces and in the Air

How Does It Work?

Units with ActivePure® Technology pull free oxygen and water molecules in the air through ActivePure®'s patented honeycomb matrix. The technology creates powerful oxidizers, known as ActivePure® Molecules, that are then released back into the room, where they seek and destroy DNA and RNA viruses including SARS-CoV-2 (novel coronavirus), Swine Flu (H1N1), Avian Bird Flu (H5N8), Hepatitis A (HAV) and MS2 bacteriophage, regardless of their size, on surfaces and in the air.

Beyond Guardian Air

(P/N: 648)

SPECIFICIATIONS

Model: F159E

Meets California ozone emissions limit. CARB Certified

Technology:

ActivePure® Ion Generation

Electrical:

Input Voltage: 120 VAC 60 Hz

Power Consumption: 23 Watts to 80 Watts

Mechanical:

Motor: 230 VAC 0.28 Amp Airflow Rate: 75 CFM - 240 CFM

Air Exchange:

351 sq. ft. at 4.2 ACH (air ch hour) or up to 2,000 sq. ft.

Dimensions:

23" H x 20" W x 11" D (58.4 cm x 50.8 cm x 27.9 ci

Weight:

34 lbs (15.5 kg)

Operating Temp: (Return Air) 30° F to 95° F

Coverage: Up to 2,000 sq. ft.

Warranty:

Limited 5 Year Warranty (Terms & Conditions apply)





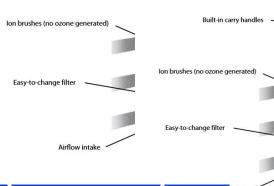


Built-in carry handles



Built-in carry handles -

ActivePure TECHNOLOGY



Replacement Parts	Part #	Replacement Period	MSRP
Beyond HEPA Filter	49457	Yearly	\$129.99
ActivePure® Cell	50077	Every 2 Years	\$149.99
UV Bulb	48710	Yearly	\$35.00
Wheel Caddy Accessory	49402	N/A	\$59.99



Power source and cord beneath unit









Guardian Angel

(P/N: 616)

SPECIFICIATIONS

Model: F179A

Meets California ozone emissions limit. CARB Certified

Technology:

PCO (Photocatalytic Oxidation)

Electrical:

Power Consumption: Low: 16 Watts / High: 28 Watts

Mechanical:

Airflow: 43-120 CFM, Motor/Fan: Designed for continuous operation, ETL approved

Filtration:

Sealed HEPA with Carbon Layer

Pre-filter:

Washable, cloth prefilter covering

Air Exchange:

108 sq.ft.at 8.5 ACH (air changes per hour), 375 sq.ft.at 2.5 ACH, 1,000 sq.ft.at 1.0 ACH

Coverage:

Up to 1000 sq.ft.

Dimensions:

10" D x 18.7" H (25.4 cm x 47.6 cm)

Weight:

9.2 lbs (4.2 kg)

5 year warranty erves the right to modify any specification



SPECIFICATIONS Power Consumption: • 23 to 80 watts

Input Voltage: • 120 VAC 60Hz

• 230 VAC 0.28 A

Air Exchange:

• 4.2 changes per hour (351 / sq. ft.)

Airflow Rate:

CFM130 m³/h • Speed 1: 75 • Speed 2: 95 CFM160 m³/h ed 3: 150 CFM250 m³/h

ed 4: 240 CFM410 m³/h

Noise Level (Sound pressure level): Speed 1: 32 dB(A) Speed 2: 39 dB(A) Speed 3: 46 dB(A) Speed 4: 58 dB(A)

Weight: • 15.5 kg

H x 20"W x 11"D

Intertek Imm H x 500mm W x 275mm D







Galvanized steel housing

Easy-to-clean ion chamber

MSRP Replacement Period Every 12-24 months \$99.99 N/A \$18.35 ActivePure* Cell UVC light for purification N/A \$18.35

Beyond By Aerus reserves the right to change or modify any

ights

ActivePure TECHNOLOGY



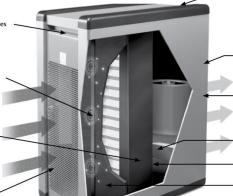
osition, 2-speed I

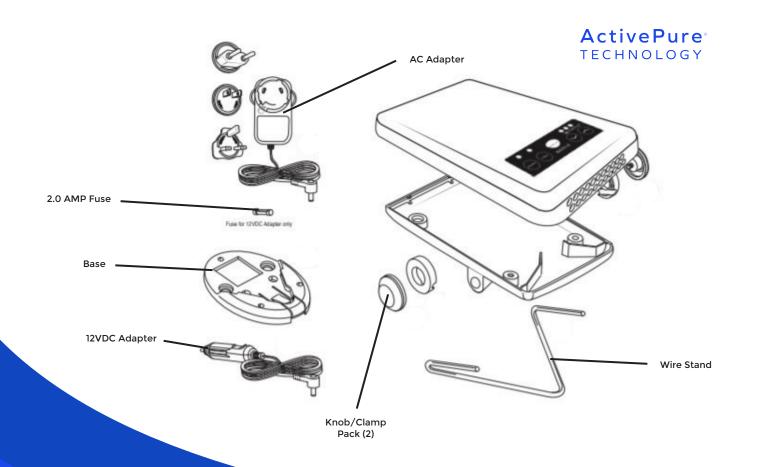
Aerus reserves the right specification without no

Negative Ionizer









Aerus Mobile

(P/N: 50111)

SPECIFICIATIONS

Electrical:

12VDC or 110- 280VAC 50/60Hz Fuse (12V DC adapter only): 2 Amp Buss type Maximum 10.7 Watts

Operating Temperature: 45° - 100° (7°C - 38°C)

Technology:

ActivePure® Technology
Fixed 8.5KV DC needle ion generator

Mechanical: 3 Speed Fan

Dimensions: 3.625" x 6" x 1.0" (9.21cm x 15.25cm x 2.54cm w/o base)

Weight:

8 ounces (.23kg)

Warranty: Limited (1) year



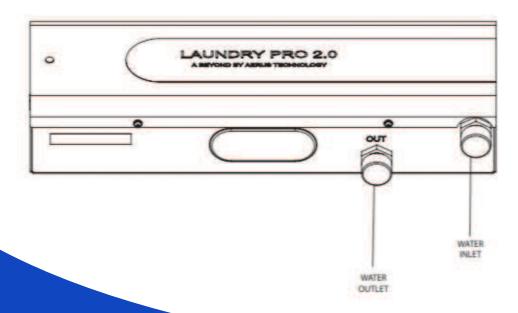








Replacement Parts	Part #	Replacement Period	MSRP
Laundry Pro AP Replacement Cell	49919	Every 24-36 months	N/A
Active Clean Port	49693	N/A	N/A











Laundry Pro 2.0 (P/N: 696)

SPECIFICIATIONS

AC/DC Adapter: AC in 100-240V ~ 50/60Hz.45A DC out 1.2V

Power Consumption: .4W AC (standby mode) 1.3W AC operating

Dynamic Pressure: Minimum 20 psi to 60 psi /137 ~4.13 bar

Water Temperature: Use cold water only (do not use hot water)

Operating Environment: 50°F - 100°F (10°C - 37.8°C) Humidity 40% ~ 85%

Dimensions: 17.3" x 5.19" x 3.69" 43.94cm x 13.48cm x 9.37cm

Weight: 4.3lbs



Hydroxyl Blaster (P/N: 00667)

SPECIFICIATIONS

Model: F203C*

This unit does not meet California requirements and cannot be shipped to California

Technology:

ActivePure® - (4) Cells

Electrical:

Input Voltage: 120V Power Consumption: 172W

Mechanical:

Fuse: 2.254; 2.0A slowblow Airflow Rate 300 CFM

Dimensions:

13"W x 22"H x 13"D

(33.02 cm x 48.26 cm x 33.02 cm)

Weight:

24 lbs (11 kg) unpackaged

Noise Level:

(Sound Pressure Level): 57.4dB(A)

Coverage:

Up to 20,000 sq. ft.

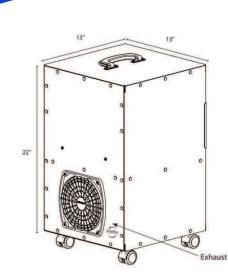
Warranty:

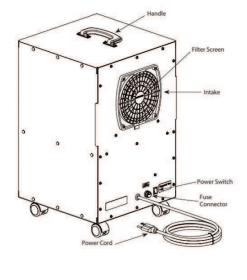
Limited 3 Year Warranty (Terms & Conditions apply)











Replacement Parts	Part #	Replacement Period	MSRP
ActivePure Cells (4)	49783	Every 2 years	N/A

The Spanish Association for Standardization and Certification (UNE) has tested the air purifier Beyond Guardian Air ActivePure™ by Aerus, for its efficiency to reduce the concentration of bacteria and fungi.

Declaration of tests and assessments

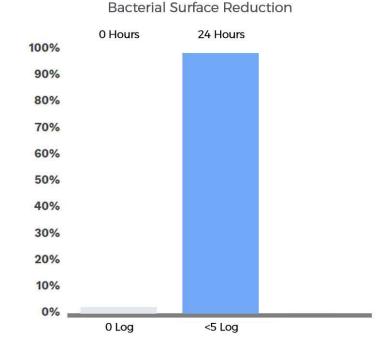
The Spanish Association for Standardization and Certification has tested the air purifier Beyond Guardian Air by Aerus for both its capacity of distribution and the efficiency to reduce the concentration of bacteria and fungi, using the Euro Norm 17272-2020.

The test was conducted with the air purifier unit installed in a 4.55 m x 5.61 m room. The efficiency of the air purifier was tested by a method where several petri dishes were placed around the room. The Beyond Guardian Air is turned on and the testing on the petri dish samples takes place for a period of 24 hours.

The efficiency and distribution of the Beyond Guardian Air, according to both tests was declared as more than 5 log.

Prepared by:

The Spanish Association for Standardization and Certification AENOR UNE



Using Euro Norm 17272-2020











Test Certificate for MPPS and Filter grade model "HEPA Guardian Air Filter – Part No. 49457"



Executive Summary

The tested filter model "HEPA Guardian Air Filter - Part No. 49457" has to be classified according ISO 16890-1 on base of the average fractional efficiency determined in new and in discharged condition as

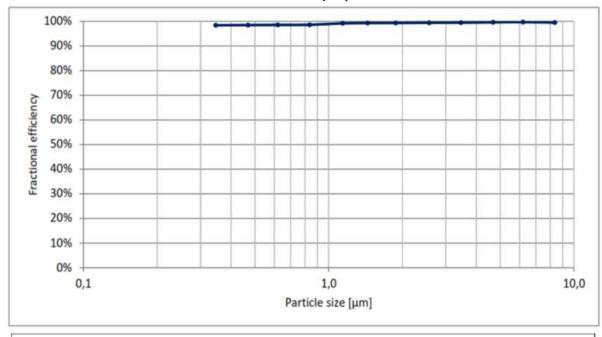
"ISO ePM10 85%"

Obviously, the filter medium is strongly electrically charged. Separation performance decreases significantly after discharging procedure of the filter element in isopropanol vapor. Without this requirement to discharge synthetic filter media the filter element would be filter class E11 according EN 1822-1 or ISO 15 E acc . ISO 29463-1:2017.

Prepared by: DMT GmbH & Co. KG

Author:
Dr. Dirk Renschen
Johannes Schamberg

Fractional Efficiency by Particle size



NOTE: The results of this test relate only to the test devise in the conditions stated herein. The performance results cannot by themselves be quantitatively applied to predict filtration performance in all "real life" environments.

classified according ISO 16890-1
DIN FN ISO 9001 ZERTIFIZIERT









Danish Technological Institute has tested the viral inactivation efficiency of Beyond Guardian Air with ActivePureTM by Aerus on aerosolized MS2 bacteriophage, a positive-stranded RNA virus



Declaration of test and assessment

The purpose of the test is to determine the efficiency of the air purifier to reduce the concentration active of aerosolized MS2 bacteriophages using a modifies ISO 1600-36-2018 method. The tested air purifier is a Beyond Guardian Air by Aerus.

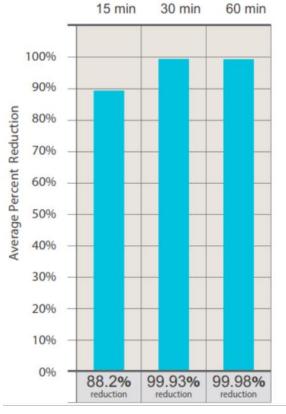
The significant and consistent difference between the Natural decay test and the Product test clearly shows a reduction of the concentration of active and airborne MS2 caused by the air purifier.

The measured decay of the concentration of active MS2 during the tests is attributed to a natural decay of the aerosol and an attribution of the air purifier. The determine attribution of the air purifier is >99.99% reduction in the 20 m³ room withing 30 minutes. In addition, the calculated half time for active MS2 is determined to be 2.8 minutes.

Report Prepared and Submitted by: Teknologist Institut Bioengineering and Environmental Technology

Author: Stig Koust Hansen, Ph.D., Consultant Quality Assurance: Caster Laur Byg, Specialist

Test Results for Beyond Guardian Air® on MS2 bacteriophages Averaged Viable Reduction %



The full testing procedures and results are presented in report no. 956985

Using ISO 16000-36:2018 method









Danish Technological Institute has tested the air purifier Beyond Guardian Air with ActivePureTM by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds from cigarette smoke

Cigarette Smoke Reduction



Declaration of test and assessment

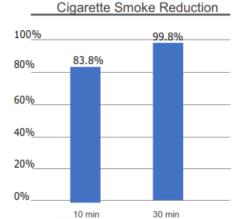
Danish Technological Institute has tested the air purifier Beyond Guardian Air by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds (VOC) from cigarette smoke using a modified ANSI/AHAM AC-1-2015 method.

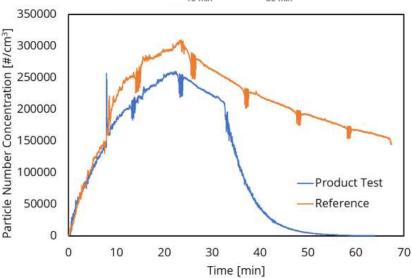
The test was conducted with the air purifier unit installed in a 20 m³ sealed room. The efficiency of the air purifier was tested by a method, where particles and VOC were generated through a smoking phase consisting of sequential smoking of three cigarettes using a smoking robot over a period of 20-25 minutes. The smoking phase is immediately followed by a 10-minute period where the cigarette smoke is mixed, before the air purifier is turned on. This marks the beginning of the 30-minutes Product Test period.

The rate of reduction of the particles and VOC was determined as the difference between a reference experiment designed to measure the natural decay rate and reduction rate measure during the use of the Beyond Guardian Air.

Report Prepared and Submitted by: Teknologist Institut Bioengineering and Environmental Technology

Author: Stig Koust Hansen, Ph.D., Consultant Quality Assurance: Caster Laur Byg, Specialist





Particle Number concentration measured over time. The smoke phase occurs during the initial 25 minutes, which is followed by a 10-minute mixing period. Hereafter the air purifier is turned on (only for product test) for 30 minutes.

using ANSI/AHAM AC-1-2015 method

The full testing procedures and results are presented in report no. 956985









Danish Technological Institute has tested the air purifier Beyond Guardian Air with ActivePureTM by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds from cigarette smoke



DANISH TECHNOLOGICAL INSTITUTE

Declaration of test and assessment

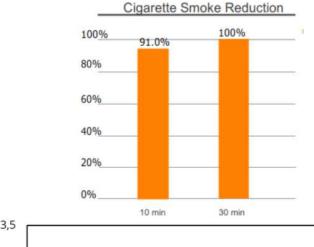
Danish Technological Institute has tested the air purifier Beyond Guardian Air by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds (VOC) from cigarette smoke using a modified ANSI/AHAM AC-1-2015 method.

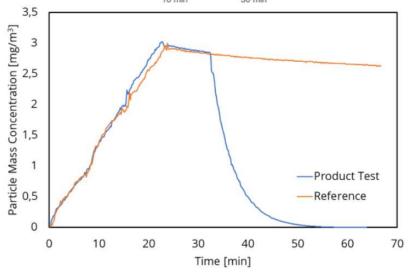
The test was conducted with the air purifier unit installed in a 20 m³ sealed room. The efficiency of the air purifier was tested by a method, where particles and VOC were generated through a smoking phase consisting of sequential smoking of three cigarettes using a smoking robot over a period of 20-25 minutes. The smoking phase is immediately followed by a 10-minute period where the cigarette smoke is mixed, before the air purifier is turned on. This marks the beginning of the 30-minutes Product Test period.

The rate of reduction of the particles and VOC was determined as the difference between a reference experiment designed to measure the natural decay rate and reduction rate measure during the use of the Beyond Guardian Air.

Report Prepared and Submitted by: Teknologist Institut Bioengineering and Environmental Technology

Author: Stig Koust Hansen, Ph.D., Consultant Quality Assurance: Caster Laur Byg, Specialist





Particle Mass concentration measured over time. The smoke phase occurs during the initial 25 minutes, which is followed by a 10-minute mixing period. Hereafter the air purifier is turned on (only for product test) for 30 minutes.

using ANSI/AHAM AC-1-2015 method

The full testing procedures and results are presented in report no. 956985









Danish Technological Institute has tested the air purifier Beyond Guardian Air with ActivePureTM by Aerus, for its efficiency to reduce the concentration of particles and volatile organic

compounds from cigarette smoke



Declaration of test and assessment

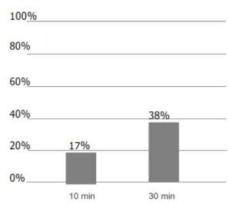
Danish Technological Institute has tested the air purifier Beyond Guardian Air by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds (VOC) from cigarette smoke using a modified ANSI/AHAM AC-1-2015 method.

The test was conducted with the air purifier unit installed in a 20 m³ sealed room. The efficiency of the air purifier was tested by a method, where particles and VOC were generated through a smoking phase consisting of sequential smoking of three cigarettes using a smoking robot over a period of 20-25 minutes. The smoking phase is immediately followed by a 10-minute period where the cigarette smoke is mixed, before the air purifier is turned on. This marks the beginning of the 30-minutes Product Test period.

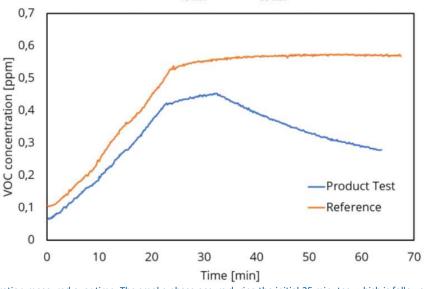
The rate of reduction of the particles and VOC was determined as the difference between a reference experiment designed to measure the natural decay rate and reduction rate measure during the use of the Beyond Guardian Air. The concentrations of particles and VOC were measured continuously with a time resolution of 10 seconds. We have previously preformed proton transfer reaction mass spectrometry on cigarette smoke and found high concentrations of acetaldehyde, formaldehyde and various fragments of acetic acid the FDA list 33 different VOCs in mainstream cigarette smoke.

Report Prepared and Submitted by: Teknologist Institut Bioengineering and Environmental Technology

Author: Stig Koust Hansen, Ph.D., Consultant Quality Assurance: Caster Laur Byg, Specialist



TVOC Reduction



VOC concentration measured over time. The smoke phase occurs during the initial 25 minutes, whish is followed by a 10-minute mixing period. Hereafter the air purifier is turned on (only for product test) for 30 minutes

using ANSI/AHAM AC-1-2015 method
The full testing procedures and results are presented in report no. 956985









Beyond Guardian Air and Pure and Clean Air Purification Systems with ActivePure™ Tested – No Ozone

Executive Summary

Danish Technological Institute assess that neither of the tested Air Purification Systems give rise to ozone accumulation.

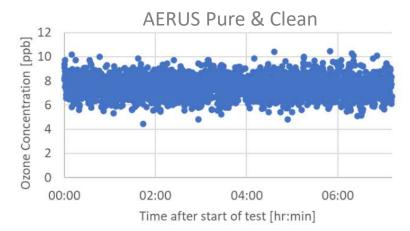
The background ozone concentration in the test chamber was measured to 7±2 ppb prior to the tests.

The ozone concentration was continuously measured with a Teledyne API Ozone Analyzer model 430. The instrument can measure ozone concentration in the range from 0 - 20 000 ppb (20 ppm) with a precision of 0.5 ppb and a lower detection limit of 2 ppb. The measurement was performed with time resolution of 10 seconds.

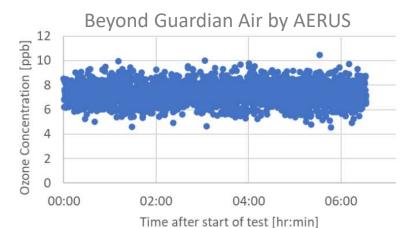
Report Prepared and Submitted by: Teknologist Institut Bioengineering and Environmental Technology

Author: Stig Koust Hansen, Ph.D., Consultant

Quality Assurance: Thomas Nørregaard Jensen Consultant



Ozone concentration measured in test chamber during test of AERUS PURE & CLEAN with ActivePure



Ozone concentration measured in test chamber during test of BEYOND GUARDIAN AIR with ActivePure BY AERUS









Aerus Pure and Clean Unit with ActivePure™ Testing Airborne SARS-CoV-2 Virus Reduction

Executive Summary

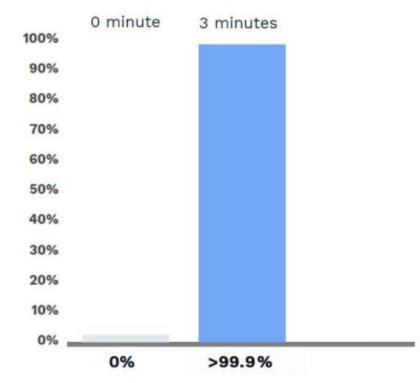
The Aerus technology inactivated airborne SARS-CoV-2 to undetectable levels. The results show that, when accounting for the LLD, the percent reduction in virus was ≥99.87 to ≥99.96%; however, since no virus was detected after using the experimental device, the true percent reduction was likely greater than 99.99% in every case. The true net reduction could not be determined due to the LLD of the quantitation assay, but this too was likely greater than 99.99%.

Report Prepared and Submitted by:

William S. Lawrence, Ph.D. Assistant Professor, Microbiology & Immunology University of Texas Medical Branch (UTMB)

Jennifer E. Peel, B.S. Senior Research Associate, Microbiology & Immunology University of Texas Medical Branch (UTMB)

Airborne SARS-CoV-2 Virus Reduction



NEW PURE & CLEAN UNIT TESTING

Testing done at UTMB BSL Level 3 Lab with assistance from BSL Level 4 Lab, complying with FDA protocols in a FDA Certified Compliant Laboratory.









VERIFICATION OF THE EFFECTIVENESS OF ACTIVEPURE® TECHNOLOGY IN DECONTAMINATION OF SARS-COV-2 ON SURFACES



Preface

This final report was prepared at MRIGlobal (MRIGlobal) for the work performed under MRIGlobal Task No. 311624.01.001, "Verification of the Effectiveness of ActivePure® Technology in Decontamination of SARS-CoV-2"

Test devices were supplied to MRIGlobal by Aerus, LLC for the conduct of the program. The experimental phase of this task was initiated by MRIGlobal on May 18, 2020 and ended on June 19, 2020.

The Study Director of the program was Rick Tuttle. Execution of the study was assisted by Carl Gelhaus, Ph.D., Luca Popescu, Ph.D., Kristen Solocinski, Ph.D., Sam Humphries, and managed by William Sosna.

The studies were performed in compliance with MRIGlobal QA procedures. All operations pertaining to this study, unless specifically defined in this protocol, were performed according to the Standard Operating Procedures of MRIGlobal or approved laboratory procedures, and any deviations were documented.

MRIGLOBAL

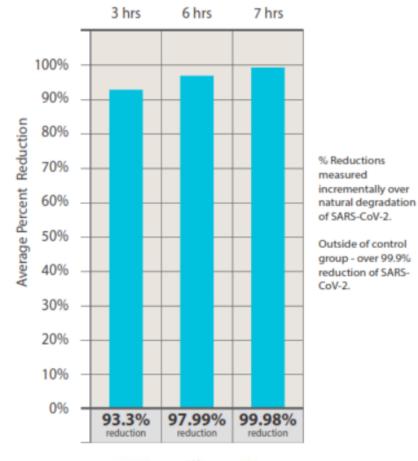
Rick Tuttle Study Director

Richard Suttle

Approved by:

Ed Sistrunk Division Director Medical Countermeasures

Test Results for ActivePure® SARS-CoV-2 Averaged Viable Reduction %









Active Pure® TECHNOLOGY

Aerus Air Filtration Products