

lab tests

SARS-CoV-2

Lab Test: Aerosol Deactivation of SARS-CoV-2

Results : 99.98% inactivation of SARS-CoV-2



- Product: Active HEPA+
- Technologies: PCO/BPI/HEPA/ODOGard
- Test time: 3:20 minutes
- Air exchange equivalent: 10
- Test space: Class III Biosafety Cabinet, 2.5x3.5x1.5 ft
- Test administrator: MRIGlobal

These tests conclude that the Active HEPA+ is highly effective at reducing the infectivity of aerosolized SARS-CoV-2 virus with a 3.63 log (99.98%) reduction within three (3) minutes and twenty (20) seconds of operation in relation to baseline control results.

These results also show that HEPA+ had a reduction in aerosol mass and median size within the three (3) minutes and twenty (20) seconds of operation, with a mass removal of approximately 2 logs.

While particle mass reductions of only 2 logs were observed, Active HEPA+ demonstrated viral infectivity reductions greater than 3.5 logs, which supports the hypotheses that both active and passive technologies contribute to overall product efficacy.

Lab Test: Aerosol Deactivation of SARS-CoV-2

Results : 99.98% inactivation of SARS-CoV-2



- Product : pureAir 3000+
- Technologies: PCO/MERV/ODOGard
- Test time: 5:30 minutes
- Air exchange equivalent: 10
- Test space: Class III Biosafety Cabinet, 2.5x3.5x1.5 ft
- Test location: MRIGlobal

These tests conclude that the pureAir 3000+ is highly effective at reducing the infectivity of aerosolized SARS-CoV-2 virus with a 3.71 log (99.98%) reduction within five (5) minutes and thirty (30) seconds of operation in relation to baseline control results.

These results also show that 3000+ had a reduction in aerosol mass and median size within the five (5) minutes and thirty (30) seconds of operation, with a mass removal of approximately 1 log.

While particle mass reductions of only 1 log was observed, pureAir 3000+ demonstrated viral infectivity reductions greater than 3.5 logs, which supports the hypotheses that both active and passive technologies contribute to overall product efficacy.

lab tests

SARS-CoV-2

Lab Test: Surface Deactivation of SARS-CoV-2

Results : 86.98% inactivation of SARS-CoV-2



- Product: pureAir HVAC
- Technologies: PCO/BPI
- Test time: 4 hours
- Surface type: Stainless steel
- Test space: Test chamber, 9x9x9ft
- Test location: MRIGlobal

These tests conclude that the purAir HVAC PCO + BPI technology is effective at reducing surface SARS-CoV-2 infectivity in vitro after 4h of exposure.

Test samples had 0.89 log (86.98%) lower infectivity of SARS-CoV-2 as compared to control samples.

TYPE	REDUCED	TIME	SPACE	LOCATION	MODEL	DATE
Aerosol	99.98%	3:20 minutes	3.5×1.5×2.5' Bio Hazard Chamber	MRIGlobal	Active HEPA+ Pro	9/2021
Aerosol	99.98%	5:35 minutes	3.5×1.5×2.5' Bio Hazard Chamber	MRIGlobal	pureAir 30000 (no O3)	9/2021
Surface	86.98%	4 hours	9x9x9' Chamber	MRIGlobal	pureAir HVAC (50% O3)	7/2021

lab tests

S. aureus (MRSA)

Lab Test: Surface Deactivation of MRSA

Results : >99.99% inactivation of MRSA on surface



- Product : pureAir HVAC
- Technologies: PCO/O3 (20%)
- Test time: 6 hours
- Surface type: Glass
- Test space: Test chamber
- Test location: Microchem

These tests conclude that the pureAir HVAC purAir HVAC PCO + O3 technology is effective at reducing surface MRSA infectivity in vitro after 6h of exposure.

Test samples had >4.75 log (>99.99%) lower infectivity of MRSA as compared to control samples.

Test also demonstrated that the pureAir HVAC technologies did not raise PPM of H2O2 or O3 in the chamber during the experiment.

Lab Test: Surface Deactivation of MRSA

Results : >93.9% inactivation of MRSA on surface



- Product : pureAir HVAC
- Technologies: PCO/BPI/O3 (20%)
- Test time: 6 hours
- Surface type: Glass
- Test space: Test chamber
- Test location: Microchem

These tests conclude that the pureAir HVAC purAir HVAC PCO + BPI + O3 technology is effective at reducing surface MRSA infectivity in vitro after 6h of exposure.

Test samples had 1.26 log (93.9%) lower infectivity of MRSA as compared to control samples.

Test also demonstrated that the pureAir HVAC technologies did not significantly raise PPM of H2O2 or O3 in the chamber during the experiment.

lab tests

S. aureus (MRSA)

Lab Test: Surface Deactivation of MRSA

Results : 69.6% inactivation of MRSA on surface



- Product : pureAir HVAC
- Technologies: PCO/BPI
- Test time: 6 hours
- Surface type: Glass
- Test space: Test chamber
- Test location: Microchem

These tests conclude that the pureAir HVAC purAir HVAC PCO + BPI technology is effective at reducing surface MRSA infectivity in vitro after 6h of exposure.

Test samples had .61 log (69.6%) lower infectivity of MRSA as compared to control samples.

Test also demonstrated that the pureAir HVAC technologies did not raise PPM of H2O2 or O3 in the chamber during the experiment.

TYPE	REDUCED	TIME	SPACE	LOCATION	MODEL	DATE
Surface	69.61%	6 hours	Controlled Chamber	Microchem	pureAir HVAC (PCO/BPI/No O3)	8/2021
Surface	>99.99%	6 hours	Controlled Chamber	Microchem	pureAir HVAC (PCO/20% O3)	8/2021
Surface	93.93%	6 hours	Controlled Chamber	Microchem	pureAir HVAC (PCO/BPI/20% O3)	8/2021
Surface	>99.95%	6 hours	Controlled Chamber	Microchem	pureAir HVAC (50% O3)	11/2020