

Science Testing Results

TADIRAN AIROW 1™ Scientific Booklet

Test Subject	Tested Species / Methods	Test Facility	Results
COVID-19 virus	SARS-CoV-2	Innovative Bioanalysis	99.998%
Virus	RNA Virus MS2 Bacteriophage	Aerosol Research and Engineering Laboratories	99.98%
Virus	Phi6	Campden BRI (30 m3)	99.5%
Bacteria	Staphylococcus Epidermidis	Aerosol Research and Engineering Laboratories	99.9%
Mold Spores	Aspergillus Niger	Aerosol Research and Engineering Laboratories	98.93%
Volatile Organic Compounds (VOC)	Method TO-15	EMSL Analytical laboratories	VOC emission safe
Formaldehyde	Method 2016	EMSL Analytical laboratories	Reduction in levels of Formaldehyde
Hydrogen Peroxide	OSHA 1019	LCS Laboratory	<1 ppm in 8 h

TADIRAN AIROW 1™ REDUCED DETECTED SARS-COV-2 AEROSOL LEVELS BY **99.998% IN 1 ½ HOURS**

TADIRAN AIROW 1 device was tested in the US-based internationally recognized laboratory Innovative Bioanalysis, which is BSL3 accredited. TADIRAN AIROW reduced the amount of aerosolized SARS-CoV-2 in 1 cubic meter test chamber, after 90 min only 0.002% of the virus was detected.

Did you know

People With Type A Blood May Be More Susceptible To Infection. A Number Of Studies On Numerous Individuals Who Were Hospitalized With Covid-19 Have Found [1] That The Proportion Of Sick People With Type A Blood Was Significantly Greater Than Researchers Would Expect Based Upon The Percentage Of People With Type A Blood In The General Population. The Studies Also Found That There Were Fewer Sick People With Type O Blood Than Would Be Expected.

[Read the Article 1 →](#)

TADIRAN AIROW 1™ REDUCED DETECTED LEVELS OF VIRUSES

We tested TADIRAN AIROW 1 in different laboratories and conditions and chamber sizes against surrogates of SARS-CoV-2.

TADIRAN AIROW 1 reduced levels of MS2, which is a surrogate for coronavirus and influenza levels by 99.98% in 1 1/2 hours in 1 cubic meter chamber. Meaning after 90 minutes, only 0.02% of the virus was detected inside. The test was conducted in the FDA-cleared Aerosol Research and Engineering laboratories located in the USA.

TADIRAN AIROW 1 reduced levels of Phi6 by 99.5% in 2 hours in a 30 cubic meter room. To begin the experiment we sprayed within the room and immediately afterward activated the device, thus helping mimic a real-life contaminated environment. After 120 minutes, only 0.5% of the virus was detected inside the large room. The test was conducted in the internationally recognized Campden BRI laboratories located in the UK.

Did you know

In 1976, the MS2-genome was the first genome to be completely sequenced.[2] This was accomplished by Walter Fiers and his team, building upon their earlier milestone in 1972 of the first gene to be completely sequenced, the MS2 coat protein.[3] The MS2 genome is one of the smallest known, consisting of 3569 nucleotides of single-stranded RNA,[2] and it encodes just four proteins.

[Read the Article 2 →](#)

[Read the Article 3 →](#)

TADIRAN AIROW 1™ REDUCED STAPHYLOCCOCUS EPIDERMIS BY 99.9% IN 1 ½ HOURS.

In FDA-cleared Aerosol Research and Engineering Laboratory, TADIRAN AIROW 1 was tested against Staphylococcus Epidermidis bacteria. After 90 minutes, only 0.1% of the bacteria was detected in 1 cubic meter chamber.

Did you know

Staphylococcus Epidermidis bacteria is used as a simulator for the much more dangerous, disease-causing bacteria called Staphylococcus aureus. S. aureus can cause a range of illnesses, from minor skin infections, such as cellulitis, folliculitis, carbuncles, and abscesses, to life-threatening diseases such as pneumonia, meningitis, osteomyelitis, endocarditis, toxic shock syndrome, bacteremia, and sepsis. It is still one of the five most common causes of hospital-acquired infections and is often the cause of wound infections following surgery. Each year, around 500,000 patients in hospitals in the United States contract a staphylococcal infection, chiefly by S. aureus.[4] Up to 50,000 deaths, each year in the United States are linked to S. aureus infections.[5]

[Read the Article 4 →](#)

[Read the Article 5 →](#)

TADIRAN AIROW 1™ REDUCED LEVELS OF ASPERGILLUS NIGER BY 98.93% IN 2 HOURS

In FDA-cleared Aerosol Research and Engineering Laboratory, TADIRAN AIROW 1 was tested against Aspergillus Niger, and after 120 minutes only 1.07% of the fungus was detected in 1 cubic meter chamber.

Did you know

Aspergillus Niger, the black fungus serves as a simulator of Aspergillus fumigatus a very dangerous mold that causes allergies asthma attacks, and chronic diseases. Aspergillus fumigatus is a species of fungus in the genus Aspergillus and is one of the most common Aspergillus species to cause disease in individuals with immunodeficiency.

TADIRAN AIROW 1™ DEVICE VOC EMISSION TESTED

AIRMD laboratories in collaboration with EMSL Analytical laboratories found that TADIRAN AIROW 1 is a non-VOC emitting device.

The test was performed in a large conference room approximately 380 sq ft in a commercial building in Pennsylvania. The laboratory data identified negligible changes in VOC concentrations in the indoor air, with and without the TADIRAN AIROW 1 device active in the room.

AirMD used its best professional judgment and followed industry standards in completing the project.

Did you know

Breathing VOCs can irritate the eyes, nose, and throat can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer.

FORMALDEHYDE TADIRAN AIROW™ TECHNOLOGY REDUCED LEVELS OF FORMALDEHYDE BY 47%

AIRMD in collaboration with EMSL Analytical laboratories found that TADIRAN AIROW 1 reduced Formaldehyde by 47% in 24 hours. A reduction of formaldehyde occurred during the operation allows us to assume the technology may be effective at reducing formaldehyde from the ambient air.

AirMD used its best professional judgment and followed industry standards in completing the project.

Did you know

Sources of formaldehyde in the home include building materials, smoking, household products, and the use of un-vented, fuel-burning appliances, like gas stoves or kerosene space heaters. Formaldehyde is one of the most commonly used chemicals in resin, plastics, and lamination production. At higher levels, formaldehyde exposure can cause skin rashes, shortness of breath, wheezing, and changes in lung function. Children, the elderly, and people with asthma or other breathing problems may be more sensitive to the effects of formaldehyde. Studies of workers exposed to high levels of formaldehyde, such as industrial workers and embalmers, have found that formaldehyde causes myeloid leukemia and rare **cancers, including cancers of the paranasal sinuses, nasal cavity, and nasopharynx [6].**

[Read the Article 6 →](#)

TADIRAN AIROW 1™ WAS FOUND TO MEET THE OCCUPATIONAL EXPOSURE LIMIT OF HYDROGEN PEROXIDE AS DEFINED BY OSHA (LESS THAN 1PPM FOR 8 HOURS)

The test measured Hydrogen Peroxide in the air during the operation of the TADIRAN AIROW 1 device for 8 hours. Detected concentrations of Hydrogen Peroxide were significantly less than the occupational (Industrial) exposure limit of 1 ppm as defined in Canada (2019, Occupational Exposure Limits for Ontario Workplaces, Regulation 833) as well as in the USA (2019, OSHA PEL, OSHA Annotated Table Z-1). TADIRAN AIROW 1 was rigorously tested to meet the highest standards.

Did you know

Hydrogen Peroxide is one of the most powerful nonselective wide range biocide known to man. Hydrogen Peroxide is created as part of many natural processes, for example, Hydrogen peroxide is produced by immune cells in the human body to kill microorganisms and they use catalase also to reduce damage to the human cell making the hydrogen peroxide. In the human body, hydrogen peroxide is also produced primarily in three places: lung, gut, and thyroid gland.

TADIRAN AIROW 3™ Scientific Booklet

Test Subject	Tested Species / Methods	Test Facility	Results
COVID-19 virus	SARS-CoV-2	Innovative Bioanalysis	99.99%
Virus	RNA Virus MS2 Bacteriophage	Aerosol Research and Engineering Laboratories	99.994%
Bacteria	Staphylococcus Epidermidis	Aerosol Research and Engineering Laboratories	99.994%
Hydrogen Peroxide	OSHA 1019	LCS Laboratory	<1 ppm
Ozone	UL 2998	Intertek	<5 ppb

TADIRAN AIROW 3™ REDUCED DETECTED SARS-COV-2 AEROSOL LEVELS BY **99.99% in 1 ½ hours**

TADIRAN AIROW 3 device was tested in the US-based internationally recognized laboratory Innovative Bioanalysis, which is BSL3 accredited. TADIRAN AIROW 3 reduced the amount of aerosolized SARS-CoV-2 in 18 cubic meter test chamber, after 90 min only 0.01% of the virus was detected

Did you know

Trained scent dogs are able to detect people infected with COVID-19

"Sniffer dogs" may be able to use their highly developed sense of smell to single out people infected with COVID-19, regardless of whether they have symptoms, according to a triple-blind randomized validation trial and real-life observations. The experiment was conducted at the Helsinki-Vantaa International Airport: the dogs sniffed skin swabs from 303 incoming passengers also tested for COVID-19 using polymerase chain reaction (PCR) from September 2020 to April 2021 and the obtained results demonstrated an accuracy greater than 90%. [1]

[Read the Article 1 →](#)

TADIRAN AIROW 3™ REDUCED DETECTED MS2 LEVELS BY **99.994% in 1 hour**

We tested TADIRAN AIROW 3 against MS2 an RNA virus used as SARS-CoV-2 surrogate.

TADIRAN AIROW reduced MS2 levels in one cubic meter chamber. After 60 minutes, only 0.006% of the virus was detected inside. The test was conducted in the FDA-cleared Aerosol Research and Engineering laboratories located in the USA.

Did you know

In 1976, the MS2-genome was the first genome to be completely sequenced. This was accomplished by Walter Fiers and his team, building upon their earlier milestone in 1972 of the first gene to be completely sequenced, the MS2 coat protein. The MS2 genome is one of the smallest known, consisting of 3569 nucleotides of single-stranded RNA, and it encodes just four proteins.[2, 3]

[Read the Article 2 →](#)

[Read the Article 3 →](#)

TADIRAN AIROW 3™ REDUCED METHICILLIN RESISTANT STAPHYLOCOCCUS EPIDERMIDIS BY **99.994% in 1 hour.**

In FDA-cleared Aerosol Research and Engineering Laboratory, TADIRAN AIROW 3 was tested against Staphylococcus Epidermidis bacteria. After 60 minutes, only 0.006% of the bacteria was detected in one cubic meter chamber.

Did you know

Staphylococcus Epidermidis bacteria is used as a simulator for the much more dangerous, disease-causing bacteria called Staphylococcus aureus. S. aureus can cause a range of illnesses, from minor skin infections, such as cellulitis, folliculitis, carbuncles, and abscesses, to life-threatening diseases such as pneumonia, meningitis, osteomyelitis, endocarditis, toxic shock syndrome, bacteremia, and sepsis. It is still one of the five most common causes of hospital-acquired infections and is often the cause of wound infections following surgery. Each year, around 500,000 patients in hospitals in the United States contract a staphylococcal infection, chiefly by S. aureus.[4] Up to 50,000 deaths, each year in the United States are linked to S. aureus infections.[5]

[Read the Article 4 →](#)

[Read the Article 5 →](#)

TADIRAN AIROW 3™ WAS FOUND TO MEET THE OCCUPATIONAL EXPOSURE LIMIT OF HYDROGEN PEROXIDE AS DEFINED BY **OSHA (less than 1ppm for 8 hours)**

The test conducted in agreement with OSHA analytical method 1019, measured hydrogen peroxide in the air during the operation of the TADIRAN AIROW 3 device for 8 hours. Detected concentrations of the Hydrogen Peroxide were significantly less than the occupational (Industrial) exposure limit of 1 ppm as defined in Canada (2019, Occupational Exposure Limits for Ontario Workplaces, Regulation 833) as well as in the USA (2019, OSHA PEL, OSHA Annotated Table Z-1). TADIRAN AIROW 3 was rigorously tested to meet the highest standards.

Did you know

Hydrogen Peroxide is one of the most powerful nonselective wide range biocide known to man. Hydrogen Peroxide is created as part of many natural processes, for example, Hydrogen peroxide is produced by immune cells in the human body to kill microorganisms and they use catalase also to reduce damage to the human cell making the hydrogen peroxide. In the human body, hydrogen peroxide is also produced primarily in three places: lung, gut, and thyroid gland.

TADIRAN AIROW 3 IS OZONE VERIFIED, UL 2998 COMPLIANT, TESTED BY TUV AND INTERTEK, AND EMITS **less than 0.005 PPM Ozone.**

Did you know

Over the last 30 years, building occupants have become increasingly aware of and interested in the indoor air quality of their homes, schools, offices and other spaces. This mindset shift has generated a growing interest in air cleaning devices using various methods of operation, such as filtration, ionisation or ultraviolet light as part of standalone units or incorporated into the HVAC system. Demand for such products has increased dramatically with the onset of the COVID-19 pandemic.

However, some technologies used in air cleaning devices have the potential to create ozone. Ozone is a highly reactive gas that can be a powerful respiratory irritant on its own and can react with other compounds in air to form harmful byproducts, according to the US EPA. Therefore, minimizing ozone concentrations in indoor spaces is crucial, especially during times of occupancy.

Verify, if your air purifier is Ozone emission tested.