

H₂O₂ Nature's Weapon Against Pathogens

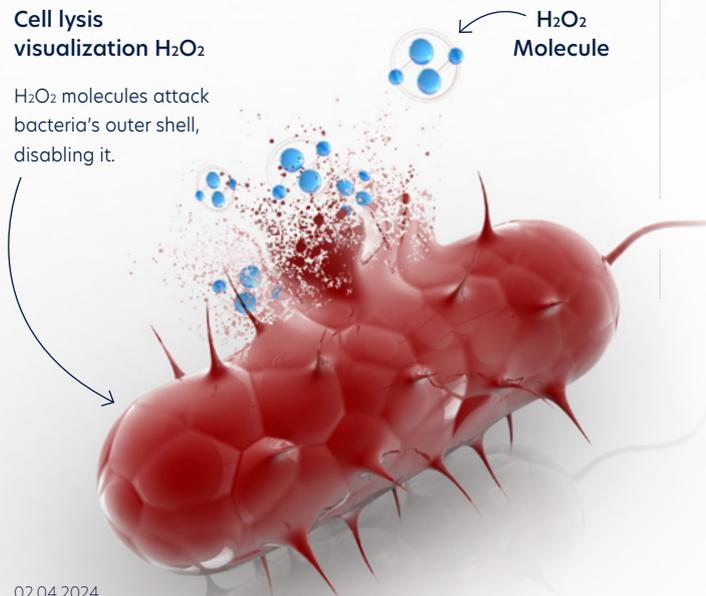
The Danger of Airborne Pathogens

Approximately 60% of respiratory and gastric infections are acquired indoors due to the rapid spread of viruses, particularly in crowded and poorly ventilated environments, leading to illness and decreased quality of life and productivity*.

- **Small and Invisible** - Airborne pathogens are a small and invisible threat that can easily spread through the air, making them an invisible enemy.
- **Undetected** - There are currently no detection or monitoring systems available for indoor viral alerts, and humans can be carriers even without symptoms.
- **Avoidance is Impossible** - Old school prevention methods of vaccination, social distancing, and masks are the best way to avoid illness.
- **Elimination is Difficult** - It is crucial to eliminate airborne bacteria and viruses to prevent colonies from forming on surfaces. In addition, sick individuals carry and distribute airborne pathogens, which can potentially infect others.

Cell lysis visualization H₂O₂

H₂O₂ molecules attack bacteria's outer shell, disabling it.



How Can H₂O₂ Help?

Hydrogen peroxide is a common chemical compound that is often used as an antiseptic, oxidizer, and bleaching agent. It is common in nature and appears in the water and atmosphere in low quantities. Its hemostatic and antimicrobial properties have made it a popular choice for use in surgery and other medical procedures for more than 100 years. Hydrogen peroxide is used daily in many common household items, such as mouthwash, toothpaste, and cleaning detergents. Therefore, it is safe and effective to use it in the fight against pathogens

Is It Safe?

Due to its highly effective yet non-toxic nature, it can also be implemented as an air purification aid. H₂O₂ is effective against pathogens even in very low volumes as vapor, and therefore it isn't toxic at these levels. During its activity it doesn't create dangerous byproducts any toxic byproducts and it is a self-degradable and non bio-accumulative material or chemical material.

How Does H₂O₂ Work?

H₂O₂ has the ability to fight pathogens in indoor air environments by traveling through the air and attacking the outer shell of pathogens, killing them. In addition it is a very stable molecule that reaches inaccessible areas and travels, creating a long-lasting effect of up to 24 hours*.



TADIRAN AIROW 3™

for Wall-Mounted Air Conditioners

TADIRAN AIROW 3™ is a hydrogen peroxide-based air cleaning device for wall-mounted air conditioners. It is a zero-maintenance solution it is a highly effective against pathogens and has low electricity usage.

It is a unique add-on device that is compatible with mini-split air conditioners, fan coils, PTACs, ceiling cassettes and VRF ductless split systems.



How it Works

TADIRAN AIROW 3™ uses a discharge current to break apart O₂ (Oxygen) molecules into two separate O atoms. The free oxygen atoms, combined with water (H₂O) molecules in the airflow, transform into purifying Hydrogen Peroxide (H₂O₂). The Hydrogen Peroxide is then distributed through the indoor air conditioning unit, traveling into the conditioned space and thus reducing aerosol pathogens.



H₂O₂ Patented Technology



VOC Emission Safe & Ozone Free



Effective Against Biological Pathogens



Plug & Play Installation



Zero Maintenance



Low Electricity Usage

Proven to Be Safe

TADIRAN AIROW™ technology was rigorously tested and found to meet the occupational exposure limit of Hydrogen Peroxide as defined by OSHA (7ppb-15ppb vs. 1ppm).

A Wall-Mounted Air Purifier is the Optimal Solution

Beyond protecting your health and ensuring that everyone in your space can breathe easier, a wall-mounted air purifier provides several additional benefits¹:

Improved Efficacy - accessible horizontal and vertical airflow is crucial in order to control airborne pathogens in the room.

Maintenance-Free - TADIRAN AIROW is maintenance-free. There is no need to change parts or call a technician for an annual checkup. It requires zero maintenance.

Space Saving Convenience - no need to place an additional unit, as the air-purifier is installed within a wall-mounted unit or a cassette.

Kids and Pets - out of reach of children and pets.

1. TADIRAN AIROW 3 device was tested in the US-based internationally recognized laboratory Innovative Bioanalysis, which is BSL3 accredited. | 2. TADIRAN AIROW 3 reduced the aerosol of Streptococcus pyogenes in 36 cubic meter test chamber, by 100% within 120 min. | 3. Independent tests commissioned by Tadiran showed that TADIRAN AIROW™ technology eliminated known aerosolized pathogens under optimal testing conditions. To learn more about the tests, visit www.tadiran-international.com/scientific-testing. | 4. Only qualified and licensed HVAC technicians may install TADIRAN AIROW. | 5. TADIRAN AIROW is verified as zero ozone. Does not emit more than 0.005PPM as tested per UL 867. | 6. World Health Organization EPA report on the environment <https://www.epa.gov/report-environment/indoor-air-quality>. Pre COVID-19. | 7. TADIRAN AIROW 3 reduced detected SARS-CoV-2 aerosol levels by 99.93% within 1 hour (16 cubic meter test chamber). | 8. TADIRAN AIROW 3 reduced MS2 levels by 99.994% in 1 hour (1 cubic meter test chamber). | 9. TADIRAN AIROW 3 reduced detected Bacteria Staphylococcus epidermidis aerosol levels by 99.994% within 1 hour (1 cubic meter test chamber) | 10. TADIRAN AIROW 3 reduced Aerosol of Blue Mold by 99.4% within 3 hours in a 25m³ chamber. | 11. TADIRAN AIROW 3 creates <15 ppb H₂O₂ based on a test conducted by LSC Laboratory inc. | 12. TADIRAN AIROW 3, tested by TUV and Intertek, does not emit more than 0.005PPM. | 13. All pictures shown are for illustration purposes only. Actual product may vary.

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