

Clean Air

PHI™ - a Clean Air technology

What is PHI™ and how does it work?

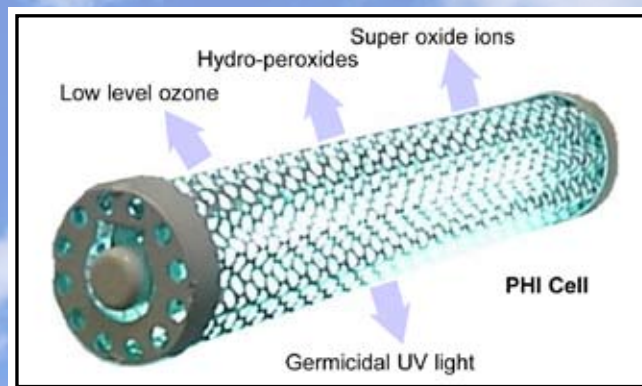
PHI™ is a patented air purification system with unique characteristics!

The air purification equipment is based on the advanced Photohydroionization technology (PHI™) and is extremely effective in improving Indoor Air Quality (IAQ). PHI™ uses a UV light and Quad Metallic Catalyst to create friendly oxidizers.

The created oxidizers include Hydro peroxides, Hydroxide ions, Super Oxide ions, and Hydroxyl Radicals. The aggressive but friendly oxidizers that are released by the PHI™ system are harmless to humans, animals and plants.

Oxidizers in order of strength:

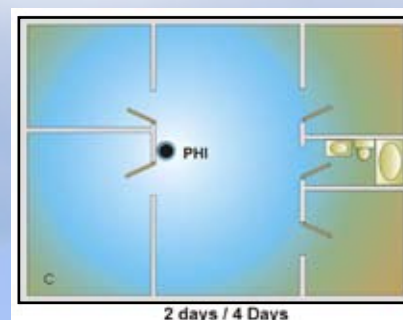
1. Fluorine
2. Hydroxyl Radical
3. Ozone
4. Hydrogen Peroxide
5. Permanganate
6. Chlorine
7. Bromine
8. Iodine
9. Oxygen



With the PHI™ cell, UV light is targeted at two different wavelengths (254 nm UV-C and 185 nm ozone) on a catalyst. The catalyst is a composition of four different metals: titanium, silver, rhodium, and copper. The oxidation process is created through a combination of ambient air and a little humidity. The advanced oxidation process provides friendly oxidizers that revert back to oxygen and hydrogen during the process.

With the oxidizers created by the PHI™ cell, we imitate the cleaning process of nature. The oxidizers travel through a room or a home on their own strength (Brownian Motion) and search for molecules to connect with.

Disinfection of rooms. The oxidizers move in a natural way through the room (Brownian Motion).



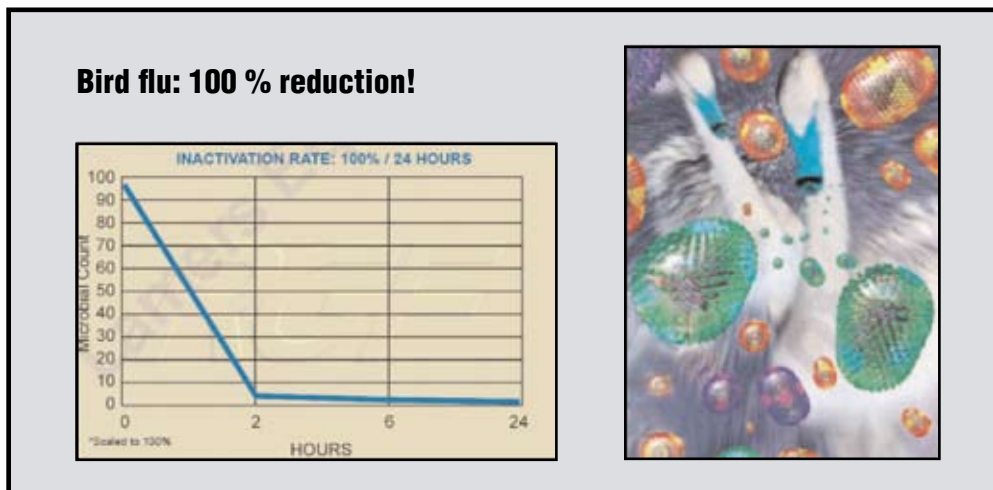
What can PHI™ do – where can you apply PHI™?

The PHI™ system can oxidize micro-organisms (bacteria, viruses, mould), gasses, odours, and VOC's, in split seconds and revert back to oxygen and hydrogen. Often a reduction of 99 % is obtained within 24 hour.

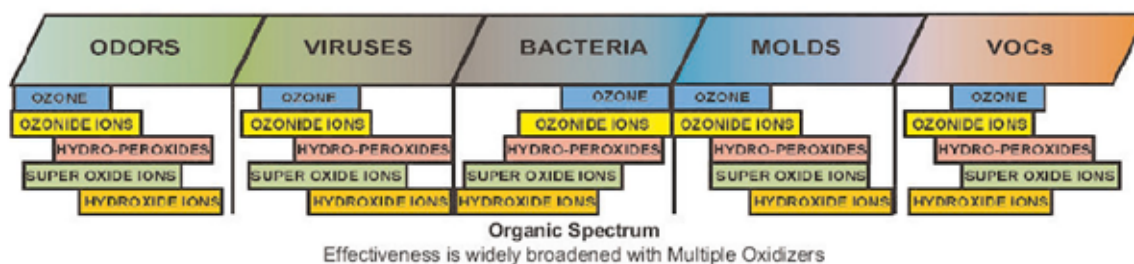
Test results on several micro-organisms:

Viruses	Reduction % (within 24 hours)	Bacteria	Reduction %
Sars virus	99+%	Staphylococcus Aureus (MRSA)	98+%
Norwalk virus	99+%	Methicillin Resistant	99+%
Avian Flu virus (bird flu)	100 %	Streptococcus Sp.	96+%
		Pseudomonas Sp.	99+%
		Listeria	99+%
		Escherichia coli	98+%
		Bacillus spp.	99+%

Also odours, chemical odours, chemical compounds and smoke are being reduced.



The schedule below shows how effective the several oxidizers are in oxidizing/burning other compounds. The PHI™ system combines several oxidizers. This increases the effectiveness enormously.



For more information and test results, see our website: www.cleanaireurope.eu

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