

TECHNOLOGY

Wellisair uses innovative patented technology which effectively generates and expands hydroxyl radicals (OH) by oxidation:

- Eliminates up to 99.9% of pathogenic micro organisms both airborne and on surfaces
- Improves air quality by reducing volatile organic compounds (VOC's) and suspended particles
- Eliminates Odours

The hydroxyl radical (OH) is the most important natural oxidant in the troposphere, It is vital in the removal of greenhouse gases such as carbon dioxide and methane. Wellisair uses clean and safe technology which constantly produces hydroxyl radicals (OH). Besides being highly efficient at disinfecting air and surfaces, it is harmless to humans. Hydroxyl radicals through the effect called "respiratory explosion", create a series of cascade reactions which quickly eliminate pathogenic micro organisms from areas up to 50-60 m2.

Suitable for multiple applications



BACTERIA

Wellisair's hydroxyl radicals (OH) cause an oxidising reaction which cross the membranes of the bacteria cell modifying their morphological structure until they reach their genetic information. This produces irreversible damage destroying the bacteria. To determine the effectiveness, tests were carried out with bacteria, both on surfaces and in the air.

Results indicate a successful demonstration of reduction in the following bacteria:

- **Bacillus subtilis**
- Staphylococcus aureus
- Resistent Staphylococcus aureus MRSA
- Pseudomonas aeruginosa
- Salmonella
- Klebsiella
- Escherichia coli

VIRUSES

Wellisair technology has been effectively tested on several viruses with different characteristics in both wet and dry environments. All tests indicate an efficacy between 92-99% of elimination on surfaces (efficiency in the air is higher), depending on the results obtained with Respiratory Syncytial Virus (RSV), Rotavirus or Coxsackievirus (hand-footmouth).



COVID-19

Respiratory Syncytial Virus (RSV) has a morphological structure similar to the coronavirus, such as the lipid membrane and glycoprotein projections. The oxidation reactions (lipid oxidation and protein oxidation) that occur in RSV are the same as they should be in COVID-19, this indicates the removal efficacy against the coronavirus should be very similar, between 92-99%.

AIR QUALITY

Wellisair's oxidative technology allows the structure of any volatile organic compound (VOC) to be changed to inert and harmless gases or water-soluble compounds. It also traps any atmospheric particles (PM) in microdroplets of moisture and makes them precipitate to the ground. A multiple of tests carried out prove a reduction of more than 93% of VOCs and particles guaranteeing an improvement in air quality.

ODOURS

Our advanced air purification technology offers a total and permanent solution to odour control. Our test results show the oxidising process destroys all the common factors which cause odours.





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