

ADVANCED OXIDATION TEST RESULTS

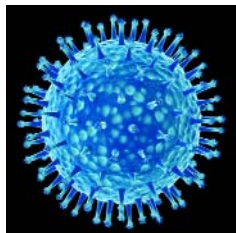
RGF - Test Results Show 99+% Inactivation of H1N1

Swine Flu

Kansas State University has completed testing on RGF's Photohydroionization (PHI-Cell[®]) and Reflective Electromagnetic Energy (REME[®] Cell) technologies with **99+% inactivation of H1N1 Swine Flu**.

2009 H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide. On June 11, 2009, the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was underway. Spread of 2009 H1N1 virus is thought to occur in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing by people with influenza. Sometimes people may become infected by touching something – such as a surface or object – with flu viruses on it and then touching their mouth or nose.

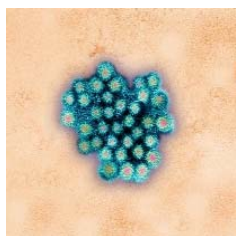
Tested by Kansas State University Inactivation Rate **99+%**



Avian influenza (Bird Flu)

Avian influenza is an infection caused by avian (bird) influenza (flu) viruses. These influenza viruses occur naturally among birds. Of the few avian influenza viruses that have crossed the species barrier to infect humans, H5N1 has had the largest number of detected cases of severe disease and death in humans. Source: CDC: Center for Disease Control and Prevention

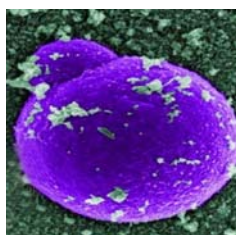
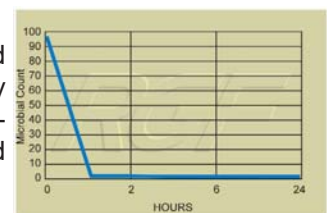
Tested by Kansas State University Inactivation Rate **99+%**



Norwalk Virus

Noroviruses are a group of related, single-stranded RNA, nonenveloped viruses that cause acute gastroenteritis in humans. Noroviruses are highly contagious and as few as 10 viral particles may be sufficient to infect an individual. 50% of all food-borne outbreaks of gastroenteritis can be attributed to noroviruses Source: CDC-Centers for Disease Control and Prevention

Tested by Midwest Research Institute Inactivation Rate **99+%**



Methicillin Resistant *Staphylococcus aureus*

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is resistant to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin.

Source: CDC Centers for Disease Control and Prevention

Tested by Kansas State University Inactivation Rate **99+%**



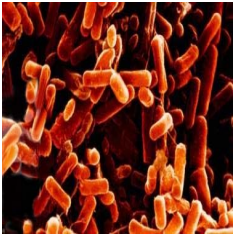


Streptococcus Sp.

Group A *Streptococcal* (strep) infections are caused by group A *streptococcus*, a bacterium responsible for a variety of health problems.

Source: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Tested by Kansas State University Inactivation Rate **96+%**



Pseudomonas Sp.

The bacterial genus *Pseudomonas* includes plant pathogenic bacteria such as *P. syringae*, the opportunistic human pathogen *P. aeruginosa*, the ubiquitous soil bacterium *P. putida*, and some species that are known to cause spoilage of unpasteurised milk and other dairy products.

Tested by Kansas State University Inactivation Rate **99+%**

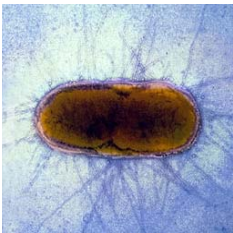
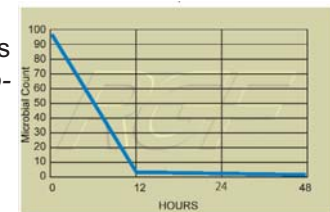


Listeria

This is a Gram-positive bacterium, motile by means of flagella. Some studies suggest that 1-10% of humans may be intestinal carriers of *L. monocytogenes*.

Source: U.S. Food and Drug Administration

Tested by Kansas State University
Steris Labs
KAG / Eco Labs
Inactivation Rate **99+%**

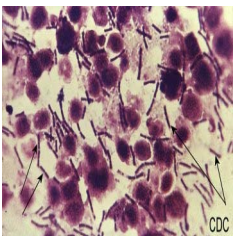
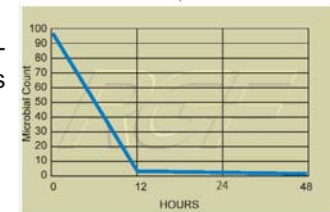


Escherichia coli

Escherichia coli, usually abbreviated to *E. coli*, discovered by Theodor Escherich, a German pediatrician and bacteriologist, is one of the main species of bacteria that live in the lower intestines of mammals, known as gut flora.

Source: CDC: Center for Disease Control and Prevention

Tested by Kansas State University Inactivation Rate **99+%**

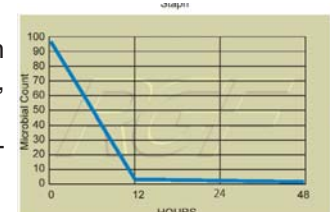


Bacillus Globigii

Bacillus globigii lives in soils around the world and can readily be found in samplings of wind-borne dust particles. It is also known as *Bacillus subtilis*, its more modern name.

Information source: CDC (Center for Disease Control) and Los Alamos National Laboratory

Tested by Kansas State University Inactivation Rate **99+%**

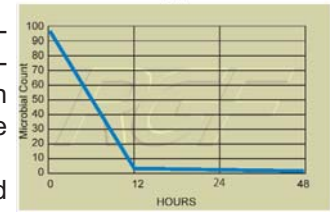


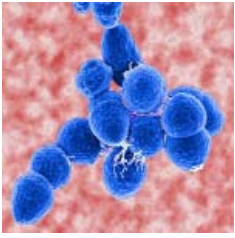
Staphylococcus Aureus

Staphylococcus aureus, often referred to simply as "staph," is a bacteria commonly found on the skin and in the nose of people. Person-to-person transmission is the usual form of spread and occurs through contact with secretions from infected skin lesions, nasal discharge or spread via the hands.

Information source: CDC (Center for Disease Control) and FDA (Food and Drug Administration)

Tested by Kansas State University Inactivation Rate **99+%**



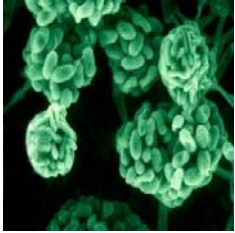


Streptococcus Pneumoniae

S. pneumoniae is an exclusively human pathogen and is spread from person-to-person by respiratory droplets, meaning that transmission generally occurs during coughing or sneezing to others within 6 feet of the carrier. Health experts estimate that more than 10 million mild infections (throat and skin) like these occur every year.

Information source: CDC (Centers for Disease Control)

Tested by Kansas State University Inactivation Rate **99+%**



Stachybotrys chartarum

Stachybotrys is a greenish-black fungus found worldwide that colonizes particularly well in high-cellular material, such as straw, hay, paper, dust, lint, and cellulose-containing building materials such as fiber board and gypsum board that become chronically moist or water damage due to excessive humidity, water leaks, condensation or flooding.

Source: Health and Industry

Tested by Kansas State University Inactivation Rate **99+%**



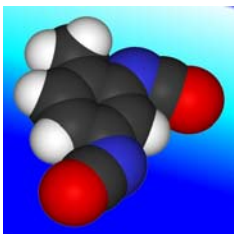
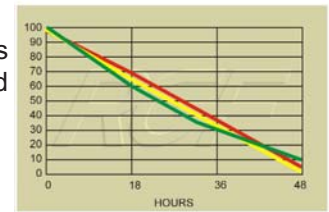
Mold/Yeast

The purpose of this test was to evaluate the effect the RGF AOT unit has on mold/yeast bacteria (TPC). This test was performed utilizing a standard 2000 sq. ft. home and 3000 sq. ft. simulated home.

Tested by California Microbiology Center

Reduction %

Bacteria 99% **Mold 97- 98%** **Yeast 90+%**



Chemical Compounds

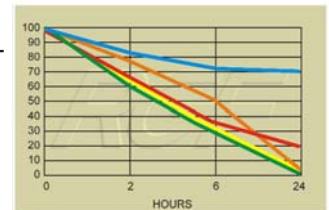
Gas Chromatograph/Mass Spectrometer test performed by Nelap Accredited Lab on airborne chemical compound reduction using RGF's AOT.

- Hydrogen Sulfide - Rotten eggs
- Methyl mercaptan - Rotten cabbage
- Carbon Disulfide - Vegetable sulfide
- Butyl Acetate - Sweet banana
- Methyl Metharcylne - Plastic

Tested by GC/MS Nelap Accredited Independent Lab

Reduction %

Hydrogen Sulfide 80% **Methyl mercaptan 100%** **Carbon Disulfide 30%** **Butyl Acetate 100%** **Methyl Metharcylne 100%**



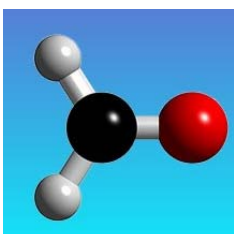
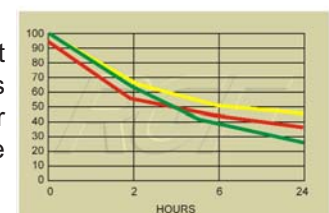
Odors

The purpose of this test was to evaluate to what effect the RGF's AOT unit has on cleaning chemicals, pet odors and perfume odors. This test was performed utilizing two 500 cubic foot test chambers and a ten-person odor panel. The qualitative assessments of the ten-person odor panel were then used as a means to determine the odor reduction.

Tested by C&W Engineering (Independent PE Firm)

Reduction %

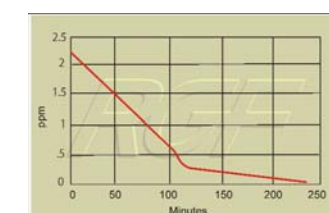
Cleaning chemicals 55+% **Pet odors 72%** **Perfume odors 63+%**



Formaldehyde

The purpose of this test was to evaluate the effect the RGF AOT unit has on formaldehyde.

Tests were conducted in test chamber by Kansas State University



Sneeze Test - REME

A testing protocol concept was used which included a "Sneeze Simulation Machine" and "Sneeze" chamber. A sneeze can travel at up to 100 mph, so we had to consider lung capacity, sneeze pressure, and liquid volume to properly simulate a human sneeze. This was accomplished and the test proceeded with outstanding results. An average of 99% reduction of microbials was achieved with REME in a double blind test, at 3 feet from the sneeze source. This is clearly not a medically supervised test or protocol. However, from a practical point, it was definitely providing some kill at the source and will provide some level of protection.

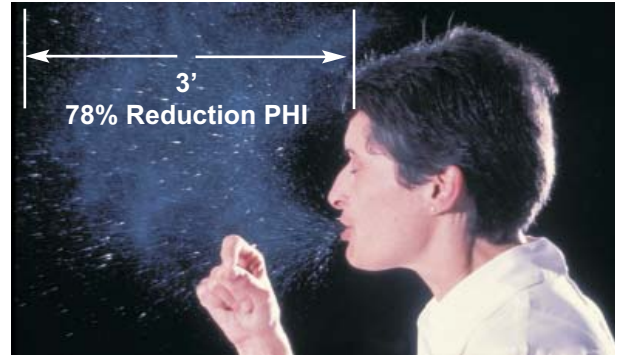
Tested by: Kansas State University, inactivation 99%



Sneeze Test - RGF PHI

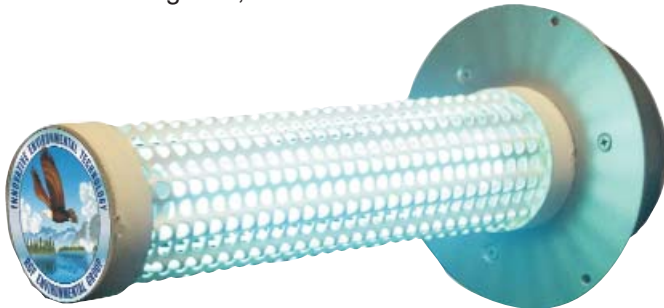
A testing protocol concept was used which included a "Sneeze Simulation Machine" and "Sneeze" chamber. A sneeze can travel at up to 100 mph, so we had to consider lung capacity, sneeze pressure, and liquid volume to properly simulate a human sneeze. This was accomplished and the test proceeded with outstanding results. An average of 78% reduction of microbials was achieved with PHI in a double blind test, at 3 feet from the sneeze source. This is clearly not a medically supervised test or protocol. However, from a practical point, it was definitely providing some kill at the source and will provide some level of protection.

Simulated Sneeze Lab Test at three feet in a 250 cu ft Bio Test Chamber. An independent PE double blind study.



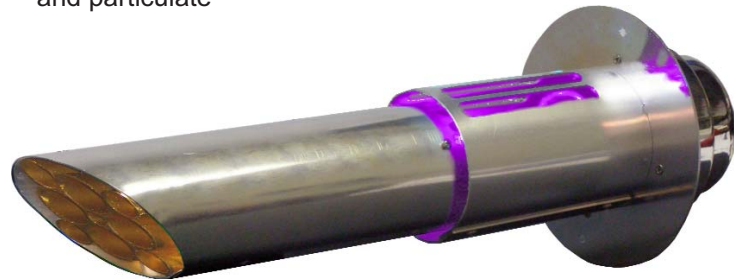
RGF Guardian Air PHI Cell

An RGF Advanced Oxidation Technology
Effective on gases, odors and microbials



RGF Guardian Air REME Cell

An RGF Advanced Oxidation Technology
Effective on gases, odors, microbials
and particulate



Disclaimer:

All the above tests were performed on RGF Advanced Oxidation products with Advanced Oxidation Plasma of less than .02 ppm. They were conducted by independent accredited labs and university studies. They were funded and conducted by RGF's major clients to assure third party credibility. RGF products are not medical devices and no medical claims are made.

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