

## Airfree Air Sterilizers

The World's Safest and Most Tested Air Purifier



### **Current Facts**

- Customers are aware that ozone is toxic.
- Airfree is the only confirmed air purifier that reduces ozone.
- A USA Today article, citing Consumer Reports: Testing Of Ionizers, makes it unambiguously clear that ionizers generate ozone and cause more harm than good.
- Air Purifier Manufacturers have no supporting independent tests confirming their claims of reduction of airborne micro-organisms in homes and offices.
- >Hepa filters are very efficient in reducing particles. Yet, their mold and micro-organism reduction claims are not supported by any independent tests.
- The public may not consider the important distinction between particle and microorganism reduction.



## **New Airfree P2000 Platinum**



- The Safest and Most Tested Air Purifier in the World.
- Focus on biological pollutants and ozone











### Why is Airfree the Safest?

Airfree does not emit substances such as ozone (considered an asthma trigger by the American EPA) and UV. Airfree technology does not generate or employ any dangerous emissions. It is not an ionizer, UV light, or ozone generator.

No replacement filters are required in the Airfree products. Filters frequently employ Fiberglass, triclosan paper, and material that can be harmful to the environment when handled or disposed of.

There is no need to change dirty and contaminated filters, therefore no need to touch harmful captured pollutants and allergens. Even if some mold spores die, they are still harmful as their mycotoxins and bio-toxins are still active. Can you imagine the difficulty of an asthmatic person needing to change his contaminated Air Purifier filter? Airfree destroys mold mycotoxins and bio-toxins, with no need of filter changes.

### Why is Airfree the Most Tested?

Unlike other manufacturers, we offer copies of independent tests assuring Airfree's outstanding efficiency in drastic reduction of airborne bacteria, moulds and viruses. Please take a look at our test section: <a href="http://www.airfree.com/testes.htm">http://www.airfree.com/testes.htm</a>



## Microbiological Pollution











- Mold is considered the current Asbestos in the USA in terms of lawsuits.
- Mold is related to several diseases including asthma and allergy reactions.
- Mold related sickness awareness is increasing in the U.S. population after a series of recent lawsuits.
- Bacteria and Viruses are a permanent threat to human health.
- Dust mite allergens (DERP1) are the main trigger of asthma and allergy symptoms.



### Why Airfree?

- Airfree is Efficient and Effective! Airfree has been tested in "real life" working environments by world-renowned institutions and laboratories, in six different countries (USA, Spain, Portugal, Germany, Sweden, and Brazil). Airfree destroys any microorganism (mold, mildew, bacteria, pollen, virus, dust mite feces and skeletons) that passes through its patented ceramic core, regardless of how small or hazardous they might be.
- Airfree is Safe! Electrical safety assured by UL (Underwriters Laboratories), CUL (Canadian Underwriters Laboratories), CE (European Community), ISO 9002, and other international certifications. Airfree technology is ozone and ion free. In fact, it has been proven to reduce ozone in the air that passes through it by 26%.
- Airfree is completely silent! Completely noiseless, no sound at all. Place your hand above the machine: if you feel warmth, the machine is working!
- Airfree saves money! As seen on the previous pages, Airfree uses very little energy and requires no replacement parts that may cost hundreds of dollars a year. Its electric consumption is lower than a 50-watt light bulb.



### Why Airfree

- Airfree requires no maintenance! Simply plug it in and forget about it. There is no need for maintenance or special cleaning. All we ask is that you wipe off the top of the machine when performing your normal dusting duties.
- Airfree requires no filter or UV lamp replacements! Replacement parts on some models can cost over \$200 per year. Why waste time and money searching for replacement parts when maintenance-free Airfree can be used instead? Also consider the trouble of replacing the parts as is necessary in other products.
- Airfree has no side effects! A totally natural process. Airfree does not employ chemical or toxic products such as ozone. Airfree also does not interfere with the room temperature or humidity level.
- Airfree is durable! With no moving parts, there is practically no wear and tear on the machine. Only years of worry free enjoyment!
- Airfree uses an exclusive sanitary technology! Airfree uses no fiberglass filters, triclosan paper, or any kind of material that can be harmful to the environment when disposed of.

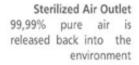




## Technology

- Mold
- Virus
- Ozone
- Pet Dander
- Bacteria
- Pollen
- > Mold
- Dust Mite Allergens
- Organic Odors

## **Purified Air**





Incineration Chamber 99,99% of all microorganisms are destroyed at high temperature.











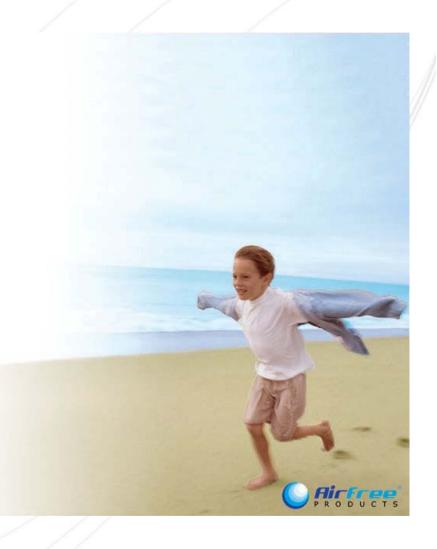




Tobacco

# Airfree fully satisfies customer demands

- Maintenance Free
- Noiseless
- Patented Technology
- Ozone Free
- Chemical Free Technology
- Tested and verified by credible independent Laboratories
- No Extra Costs for replacement parts
- Environmentally Friendly





## **Features**

- Model: Platinum
- *Capacity:* 550 sq.ft (51m<sup>2</sup>)
- Faster Performance: Microorganisms reduction only 15 minutes after Airfree is turned on.
- *Maximum external temperature*: 179.6°F (82°C)
- **Electric consumption:** 50W
- *Voltage*: 110V or 230V
- Dimensions: height 10.4 in. and diameter 8.4 in., height 26,5 cm., and diameter 21,5 cm.
- Noise level: Silent
- **Weight:** 2,1 lbs (1,27KG)
- Anti-stress Light: Yes

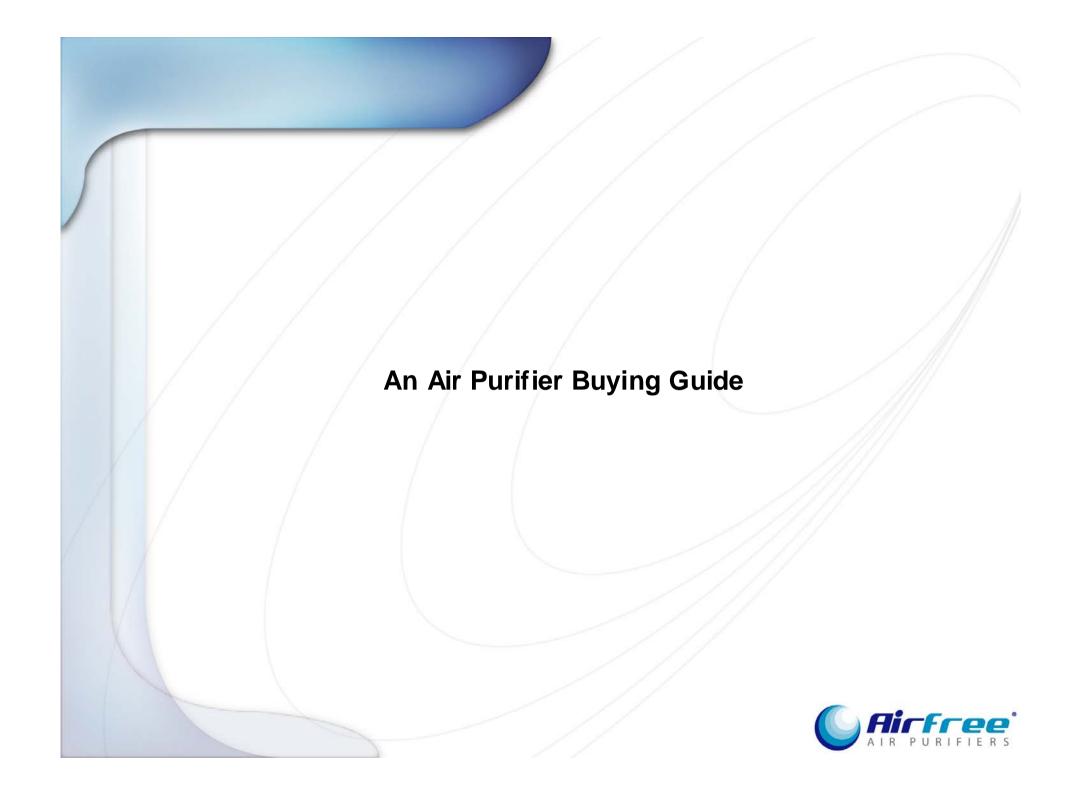


Features	Avantages	Specific Benefits
	Totally Silent	Airfree operates continuously year around. No need to choose noise pollution over air pollution.
	Uses less electricity (50w)	Airfree is energy efficient, whereas other products, draw as much as 250W.
	Maintenance Free	Saves in UV lamps and filter replacement.  No need to waste time washing or cleaning;  Save more than \$150 a year on filter and UV lamp replacement costs.
Airfree Patented incinerating chamber	The only machine that reduces toxic Ozone by 26%, as opposed to other products on the market that produce ozone.	According to the FDA (U.S. Food & Drug Administration), ozone generators and ionizers currently on the market generate ozone as a byproduct. Ozone is a toxic gas with no known useful medical application in any specific, adjunctive, or preventive therapy. In order for ozone to be effective as a germicide, it must be present in a concentration far greater than that which can be safely tolerated by men and animals.
	lon and chemical free	No need to expose your family to chemical, ions or ozone.
	Tested by Several Worldwide Institutions and Laboratories.	Finally a product that has been tested under normal conditions in various locations with or without central air conditioning. No simulations, no projections. Only facts.



Features	Advantages	Specific Benefits			
Airfree Patented incinerating chamber	While other devices trap pollutants, Airfree completely destroys airborne molds, bacteria, dust mites, allergens, viruses, and pollens.	Richard politiante eich as mold hacteria polien dust mites and anin			
	Airfree has a 99,99% destruction rate.  Destroys particles smaller than 0,03 microns, such as viruses and some bacterias that are not reduced by Hepa filters.	Se veral diseases such as flu, the common cold, rubella, pneumonia, mumps, scarlet fever, and fifth disease are caused by airbome pathogens.  Independent tests show an average of 80-85% microorganism reduction in places wherever Airfree is installed.  Airfree will help prevent such diseases.			
Compact and Portable	No need to remodel your home or office to install it.	Saves money and time.			
	Easy to install	Simply plug it in			
	Energy efficient (50w)	Saves energy costs, while others products use as much as 250W of power.			
No fan or moving parts	Totally Silent	Can be installed in your bedroom and operates continuously year			
	Lasts longer	Reduces replacement costs			
Elegant metal and ceramic design.	Clean and environmentally friendly technology	Airfree offers exceptional performance and it is harmless to the environment.  No glass filters fibers, triclosan-coated paper or any kind of material that can be harmful to the environment when disposed of.  Airfree simply uses heat. No additional V.O.C.'s (volatiles of carbon) are generated.			





# Questions to ask before purchasing an air purifier:

- Does the manufacturer provide Independent Laboratory Tests to prove their claims?
- Does the Air Purifier generate Ozone? Is it safe?
- How does the machine purify the air?
- How much will it cost to operate the Machine? What about "Hidden Costs"?
- What about noise generated by the Air Purifier?
- Is it a clean and environmental friendly technology?
- What about Size and Portability?



Airfree does not rely on an unverified "seal of approval" granted under mysterious criteria.

Airfree has been submitted to Independent Tests like no other air purifier manufacturer on the market.

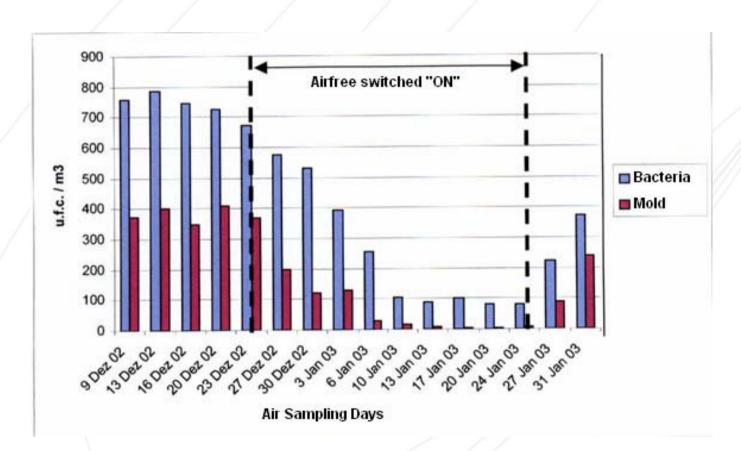
Laboratory	Place where test was performed	Country	Teste Type	Percentage of reduction		
				Mold	Bacteria	Dust mite allergens DerP-1
Insect R&D Limited	Laboratory	United Kingdom	Dust mite Allergens Derp-1			70.6% to 97.95%
SGS Natec Institute	Laboratory's Office	Germany	Fungus (mold) and Bacteria	99%	99%	
Tecnichal Micronics Control (USA)	Laboratory	USA	Fungus (mold) and Bacteria	93%	78%	
INETI	8 people office in laboratory	Portugal	Fungus (mold) and Bacteria	98%	87%	
INETI	Portuguese National Archieve	Portugal	Fungus (mold) and Bacteria	88%	78%	
INETI	RTP (Portuguese National TV Broadcaster)	Portugal	Fungus (mold) and Bacteria	96%	95%	
INETI	Portuguese Bank	Portugal	Fungus (mold) and Bacteria	74%	70%	
INETI	Portuguese National Library	Portugal	Fungus (mold) and Bacteria	69%	83%	
INETI	4 Star Hotel - Lisbon	Portugal	Fungus (mold) and Bacteria	97%	98%	
INETI	D. Estefânia Hospital	Portugal	Fungus (mold) and Bacteria	88%	98%	
Universidad Complutense de Madrid	Laboratory's Office	Spain	Fungus (mold) and Bacteria	90%	62%	
Universidad Complutense de Madrid	Laboratory's Office	Spain	Fungus (mold) and Bacteria	90%	62%	
Ainia Centro Tecnológico - Valência	Cold Chamber	Spain	Fungus (mold) and Yeast	86%	83%	
Campana	Campana Laboratory	Brazil	Fungus (mold) and Bacteria	99%	83%	



# Tests Results On Mold and Bacteria







http://www.airfree.com/testes/testeshome.htm



### **Ozone Reduction**

Test made in Sweden.



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### Measurements of ozone in the outlet of an AirFree air cleaner

### Item tested and test objective

The test object was an AirFree air sterilizer, labelled 230 V, 50 Hz, 400 mA, 46 W and serial no 53002309. According the client the AirFree unit is manufactured under license of U.S. Patent 5,874,050. The unit arrived to SP on February 27, 2001. The objective was to check for any change of ozone concentration in the air when passing through the test item. The test was performed on May 29, 2001. The test results apply only for the item tested.

### Test procedure

The test was carried out in a laboratory room at SP. The air cleaner was started two hours previous the ozone test. The ozone instrument used for measurements was a Dasibi UV-instrument, model 1003-PC, and newly calibrated. The background ozone level in the room was measured at the base of the Airfree unit and compared with concentrations at the air outlet on top of the unit. Ten readings were taken at both sampling points during 8 minutes respectively and the average for each point was calculated.

The average ozone reading was 19.5 ppb at the inlet and 14.4 ppb at the outlet.

The ozone concentration was significantly lower (at 99 % certainty level) at the air outlet of the AirFree unit compared to the inlet. The reduction could, at the given test environment, be calculated to 26 %.

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Be wary of air purifiers that claim to have been laboratory tested for efficiency.

As a matter of fact, most tests that certain manufacturers have arranged in order to prove microorganism reduction in an environment, take place in extremely small (350 cu.ft.) and closed chambers. In other words, these tests are not performed in "real world conditions", with people walking around, air conditioning systems operating and open windows and doors allowing the air circulation.

Without air circulating in the environment, it is common for mold spores to deposit themselves on surfaces, leading to their natural reduction in the air. It is also necessary to consider whether such closed chambers tests use a control sample: in other words, was the same experiment performed with no air purifying unit in order to make further comparisons.

We recommend tests in "real world conditions" and in rooms of at least 2.200 cu. ft.



# Air cleaners: The truth behind the accolades





Ads for air cleaners from Sharper Image and Oreck include a Seal of Truth from the Asthma and Allergy Foundation of America (AAFA), a Washington, D.C.-based group. Sharper Image ads also display a Seal of Approval from the British Allergy Foundation, now known as Allergy UK, and refer to university studies that supposedly support Sharper Image's air-cleaner claims. However, we discovered that the manufacturer funded some of the university studies. We also found that another seal on some of their air cleaners address the volume of clean air these machines deliver, but it does not really tell the whole story.

### What seals do not reveal:

The AAFA's "Seal of Truth" program is available to manufacturers who submit a \$5,000 application fee. According to the AAFA, companies are asked to submit "independent" research for review by a panel of experts, who determine whether a product's performance meets its claims. If the panel determines that the product fulfills its claims, manufacturers can apply the seal to that product for two years. Fewer than 12 allergy-related products, including vacuums and cleaning products, were awarded with the seal; Sharper Image's Ionic Breeze and Oreck's XL are the only air cleaners designated with the seal.

# Air cleaners: The truth behind the accolades

The AAFA states on its web site that its expert panel includes M.D.s, Ph.D.s, and Masters of Public Health. However, Michael Tringale, an AAFA spokesman, would not identify its experts, citing confidentiality concerns. Nor would Tringale or Sharper Image show us research submitted as part of the seal program. But the AAFA's literature discloses two significant points that the air-cleaner ads do not mention.

One point mentioned is that its seal is not an endorsement or statement of clinical efficacy. Yet the words on the seal for Sharper Image's Ionic Breeze, above, imply otherwise.

The other point mentioned is that its program is not a comparison but, rather, "helps consumers distinguish truthful product claims relating to asthma and allergies, regardless of how products compare to each other." In an interview, Tringale said that AAFA panel members saw a *Consumer Reports* air-cleaners report that found the lonic Breeze ineffective, but granted the seal anyway. "Because we aren't rating in comparison," Tringale said, "we asked, does the research stand up? And indeed it did." But when Sharper Image submitted studies to Consumers Union, the nonprofit publisher of *Consumer Reports*, they didn't stand up.

Full artide at: Consumer Report



# Does the air purifier generate Ozone?

According to both the **EPA** and **FDA**, ozone is a toxic gas that can destroy lung tissue, trigger asthma attacks, and cause many other respiratory diseases.

Also, some manufacturers claim that their machines produce ozone levels below the .05 ppm limit established by the EPA.

However, if a machine only produces .02 ppm, but circulates that air in the room 4 times per hour, ozone can concentrate to levels well beyond what is considered safe in a short period of time.

This is because ozone is not self destructing faster than the machine is introducing new ozone into the environment. Please note that the EPA has designated that the .05ppm limit is only for just an 8-hour period, whereas certain air purifiers are designed for 24-hour usage.

The EPA also states that there is no guarantee that these machines will maintain their ozone emissions to the levels they claim.

Quite simply: ask your doctor or vet if they would put an ozone-generating machine in their homes or offices!



# How does the machine purify the air?

Airfree is the only technology that safely destroys airborne allergens, mold spores, mildew, dust mite allergens, viruses, bacteria, and pet dander. Airfree does not use harmful emission such as UV light or ozone. Airfree uses heat instead with no noticeable heat the contribution to room temperature. Airflow is quietly achieved through air convection generated by Airfree's patented ceramic core that sterilizes air at high temperatures. Cooler air is then continuously drawn Airfree. No need for a noisy fan. No moving parts and best of all, no maintenance!



Airfree's exclusive technology has been proven to be effective by some of the world's most prestigious independent laboratories in six different countries, in real working conditions. Not only does this machine generate no ozone, it effectively reduces ozone instead. Swedish Independent tests assure. Airfree 26% Ozone reduction. There is only one air purifier in the market that reduces ozone: Airfree



## What are the operating costs?

A marketing strategy of several manufacturers is to sell their products at low prices, and then turn their large profits in form of replacement filters and UV bulbs.

Replacement filters can cost in excess of \$150 per year.

UV lights can cost well over \$30 per year.

In fact, you can spend more on the replacement parts in one year than you paid for the machine!

This is without even considering the cost of running the machine



# How much will it cost to run the machine?

Some units, especially HEPA systems, require the use of an electric engine in order to push air through the filters. Some of these units can require as much as 250 watts to operate.

The formula to use is (watts/1000) X KWH X 8760 hours= annual electricity cost

In the case of a larger HEPA unit, divide the 250 watts by 1000.

250 watts divided by 1000 = 0.250.

Now, multiply the .250 by the number of kilowatt hours you are charged on your electricity bill, or for simplicity sake, you can use .10, which is close to the actual cost of electricity in many markets.

 $0.250 \times .10 = .025$ 

Now multiply this by the number of hours the unit will run on an annual basis. The number 8760 is the number of hours in a calendar year. So to run your HEPA system continuously for the entire year, will cost you an additional fee: .025 X 8760= \$219

You can use this formula for any air cleaner on the market. For example, an Airfree Air Sterilizer uses 50 watts of energy. Using this same formula, the unit will cost \$43,80 to run for 24 hours a day, 7 days a week for the entire year.

## 5 Year Cost Projection

	Cost	Filter	Energy	UV Light	Total
Airfree Platinum (50W)	\$239.00	\$0.00	\$219	\$0.00	\$458
Hepa Filters with UV 250W	\$400.00	\$750.00	\$1,095	\$100.00	\$2,395.00

<u>lonizers and ozone generators</u> using glass plates require frequent cleaning and maintenance. Plus, these glass plates break very easily, and often need to be replaced. Ceramic plates are much less susceptible to damage, but they are still vulnerable

### With Airfree:

- No fan, no UV lights, no filters!
- The extraordinary Airfree technology saves money.
- Airfree is totally maintenance and replacement parts free.



## What about the noise?

- Some air purifiers must operate fans to reach their highest purification level. Customers should consider whether they could sleep with such noise.
- Airfree is totally silent. Airfree does not need a fan as it moves the air naturally by convection.



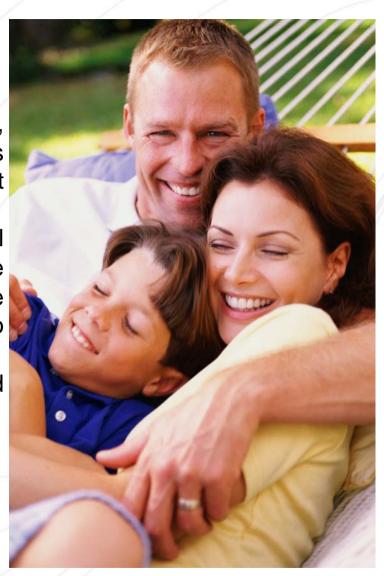


# Is the selected technology clean and environmentally friendly?

Some air purifiers use glass filter fibers, triclosan-coated paper and other materials that can be harmful to the environment when disposed of.

**Airfree** uses only heat. No additional V.O.C.'s (volatiles of carbon )are generated. No dangerous Ozone generated. No filters or UV Lights to replace.

**Airfree** offers exceptional performance and is harmless to the environment.





## **Size and Portability**

It is wise to purchase an Air Purifier that does not occupy a great deal of home space. Also, it is a great luxury to have a product that you can take on vacations or wherever indoor contamination is present.





### What have we learned?

- Customers look for devices with the same claims and advantages as ionizers.
- No Air Purifier Technology besides other than Airfree offers these advantages.
- No Air Purifier Manufacturer offers independent test reports in real life conditions.
- AAFA accolades and seals of approval are not product endorsement.
- The poor and harmful performance of ionizers have been uncovered and documented.
- Other Air Purifier Manufacturers should be tested as soon as possible.



# Airfree the new Air Purifier Reference



- Airfree is the only air purifier in the market offering the exact features customers liked in ionizers, yet with a significant difference: Airfree is extremely efficient and harmless to humans.
- Airfree is the only air purifier that reduces ozone, a growing concern nowadays.
- ➤ Airfree COMPLETELY DESTROYS MOLD



