

SaniBulb™ Air Sanitizing, Purifying, Deodorizing & Energy Saving Bulb

Cleaning your Air, Saving you Money & Saving our Planet, One Bulb at a Time™!

Features & Benefits



- ✚ Kills bacteria, viruses, fungi, mold spores & dust mites
- ✚ Reduces allergens & irritants like pollen & dander
- ✚ Breaks down pollutants into harmless components
- ✚ Eliminates odors without masking them with fragrances
- ✚ Healthy alternative to harmful chemical based products
- ✚ Helps fight global warming & deadly pollution
- ✚ Eliminates lighting carbon footprint with free carbon offsets
- ✚ Significantly reduces your total carbon footprint
- ✚ Helps comply with OSHA indoor air quality regulations
- ✚ Reduces energy consumption by 75%
- ✚ Enjoy savings of over \$350/bulb during its lifespan
- ✚ Lasts 10 times longer than incandescent bulbs
- ✚ High quality, instant on, flicker free warm inviting lighting
- ✚ Produces less heat & reduces fire hazards
- ✚ Quiet operation with no filters or maintenance
- ✚ Helps combat Seasonal Affective Disorder (SAD)
- ✚ Fits into any standard light bulb socket
- ✚ Suitable for consumer & commercial applications

Poor Indoor Air Quality is a Serious Health Hazard

No home or business environment is immune to poor indoor air quality problems. Firstly, this could result from biological contamination caused by living organisms such as bacteria, viruses, mold, pollen, dust mites and insect droppings that accumulate in ducts, carpeting, insulation and drains. Secondly, it can be caused by volatile organic compound (VOC) and chemical emissions resulting from the use of products such as cleaners, disinfectants, perfumes, air fresheners, hair sprays, cigarettes, insecticides, paint, carpets, adhesives, and laminated furniture. Thirdly, equipment such as stoves, furnaces, space heaters, printers, copy machines and various manufacturing processes can also emit noxious chemical and particulate contaminants.

Unfortunately, most ventilation systems only recirculate room air and remove large particulate matter such as dirt, dust and lint. Noxious odors, pollutants and germs are left free to recirculate in the air you breathe.

Over time, they could increase in concentration and result in serious indoor air pollution problems e.g. sick building syndrome.

According to the EPA, "indoor pollution can be as much as 100 times greater than outdoors." Research performed by the World Health Organization indicates over 30 percent of buildings worldwide are affected by contaminated indoor air. Since most people spend close to 90% of their time indoors and breathe about 20,000 liters of air/day, indoor air pollution poses a serious health risk. Medical problems that have been associated with poor indoor air quality include dizziness, headaches, eye, nose or throat irritation, dry or itchy skin, nausea, shortness of breath, difficulty in concentrating, fatigue, sensitivity to odors, allergies, asthma, depression, and chronic illnesses.

Light your way to a Cleaner & Energy Efficient Future

In a bold move to address poor indoor air quality problems, IMTEK has introduced a revolutionary new product, SaniBulb™, which combines the energy saving compact fluorescent (CFL) lamp technology with state of the art electronic and nano photocatalytic technology. This innovative multi-tasking light bulb sanitizes, purifies and deodorizes the air harnessing the power of light while saving energy and reducing pollution! SaniBulb™ empowers every individual and organization with a simple and cost effective way to improve indoor air quality while fighting global warming.

Indoor Air Quality Benefits from Switching to SaniBulb™

SaniBulb™ Kills Germs

SaniBulb™ will sanitize your air by killing various microorganisms such as bacteria, viruses, fungi, mold spores and dust mites without the use of any harmful chemical sanitizers. The next generation sanitizing coating on this bulb not only kills germs, but also decomposes the cell itself along with any toxic products. SaniBulb™ will effectively decrease the spread of germs and minimize sick days. Germs cannot become immune to SaniBulbs™ sanitizing power which is stronger than conventional chemical based disinfectants like chlorine and ozone.

SaniBulb™ Removes Allergens & Irritants

If you are one of the over 50 million people in America suffering from allergies, SaniBulb™ can help you. SaniBulb™ will purify your air by destroying airborne allergens and irritants such as pollen, tobacco smoke and pet dander by simply turning on your light. Best of all, this safe product eliminates the need for harmful chemicals and UV light commonly used for sanitizing. Fighting allergies has never been easier.

SaniBulb™ Destroys Deadly Pollutants

Indoor air pollution is caused by volatile organic compounds (VOCs) and chemical contaminants released from various products, appliances and equipment. It is a serious health threat and must be eliminated to provide a safe, healthy and productive environment. A simple and effective way to destroy harmful chemical pollutants like formaldehyde, styrene and toluene is to switch to SaniBulb™ from incandescent lights. The nano photocatalytic technology employed in this product will oxidize noxious chemical contaminants into harmless carbon dioxide and water by simply switching on a light bulb!

SaniBulb™ Eliminates Unpleasant Odors Safely

If you are currently using air fresheners, scented gels, aerosols or plug-in fresheners, you could be exposed to harmful chemicals such as benzene, formaldehyde and phthalates which tend to be emitted from these products. These chemicals have been linked to breathing difficulties, development problems in babies and cancer in lab animals according to the Sierra Club, The Natural Resources Defense Council, Alliance for Healthy Homes and the National Center for Healthy Housing. When you switch to SaniBulb™, you will be destroying odors safely instead of masking them with deadly chemicals. It is ideal for any place you have persistent odors and is a healthy alternative to harmful chemical based deodorizers.

SaniBulb™ Helps Comply with Indoor Air Quality Regulations

The US Occupational Safety and Health Administration (OSHA) regulations have Permissible Exposure Limits (PEL) for hazardous chemicals. In order to provide workers a safe environment, companies are responsible for ensuring their employees are not overexposed to hazardous substances. Most other countries also have similar regulations to ensure a safe workplace and fines can be steep for non compliance in addition to negative publicity. A simple switch to SaniBulb™ can help any company create a safer environment to comply with indoor air quality regulations by destroying deadly pollutants.

Environmental Benefits of Switching to SaniBulb™

SaniBulb™ Helps Fight Global Warming

Light is powered mainly by coal burning power plants and natural gas, both of which create greenhouse gases (GHG) that cause global warming. The EPA estimates that 1.535 lbs of greenhouse gases are released into the atmosphere for every kilowatt hour of electricity generated by a coal-fired plant.

Replacing a single 100 watt conventional incandescent light bulb with a 25 watt SaniBulb™ can prevent more than 169 pounds of coal from being burned and reduce greenhouse gas emissions by 814 pounds over the lifetime of the bulb. This is over 4,000 times SaniBulbs™ own weight in greenhouse gases!!

Looking at the big picture, it is estimated that if every American swapped a single incandescent bulb with a CFL, it would collectively save \$8 billion in energy costs, prevent burning 30 billion pounds of coal and remove 2 million cars worth of green house gas emissions from our environment. Now imagine what a difference we can make if we switched all our incandescent light bulbs to SaniBulb™.

Never before have so many people had so much power to do something as simple as changing a light bulb to fight global warming while improving indoor air quality and saving money!

SaniBulb™ Prevents Other Pollution Too

Coal-fired power plant smokestacks are also a big threat to health. In addition to releasing carbon dioxide (CO₂), they also release sulfur dioxide (main cause of acid rain), nitrogen oxide (causes smog and acid rain), radioactive pollutants (can release more than a nuclear power plant) and particulates. These deadly pollutants could lead to heart attacks, strokes, asthma attacks and premature deaths. Using SaniBulb™ will help reduce this pollution and smog by using less energy and contributing to a safer environment. Furthermore, it can also help reduce the negative impacts from radioactive waste and hydroelectric plants.

SaniBulb™ Makes your Lighting Carbon Neutral

While CFLs use 75% less electricity than their incandescent counterparts, they still require some electricity, which results in carbon dioxide emissions. We use a portion of the proceeds from the sale of each bulb to offset the carbon dioxide emissions that will be generated by SaniBulb™ over its entire life, making it a true *carbon neutral product*. The carbon offsets are made by donations of our CFLs through qualified reputable organizations so they have an immediate and real impact on global warming unlike planting of trees which could take many years to produce the same impact. We clearly state the Total Carbon Footprint Reduction (sum of the carbon reduction from converting from incandescent bulbs plus the free carbon offsets for the SaniBulbs™) you will experience when you switch to any of our SaniBulbs™.

SaniBulb™ Reduces your Overall Carbon Footprint

By using the single multi tasking SaniBulbs™ instead of electrically powered air purifiers and incandescent lights, you will be using less energy by retiring redundant appliances and inefficient lighting. Furthermore, by discontinuing the use of chemically based sanitizers and deodorizers you will further reduce your carbon footprint since these products are consumables that require a significant amount of energy and resources to produce. Therefore, by using our carbon neutral SaniBulbs™ you will be generating less carbon dioxide and reducing your overall carbon footprint in addition to making your lighting totally carbon neutral.

Savings from Switching to SaniBulb™

SaniBulb™ Reduces your Energy Consumption by 75%!

SaniBulb™ is starting to light the way to a more energy efficient tomorrow and their popularity is not surprising. Compared to the energy guzzling old fashioned incandescent light bulb technology, Sanibulbs™ extreme energy efficiency is nothing short of dazzling. A 25 watt SaniBulb™ provides an equivalent of 100 watts of traditional incandescent light resulting in energy savings of about 75%.

Due to the enormous potential to increase energy savings and reduce pollution, various organizations have undertaken a variety of creative measures to encourage the adoption of CFLs. In addition, governments across the globe have taken (e.g. US, Canada, Australia & Ireland) or are considering strong measures to encourage adoption of CFLs or to entirely displace incandescent light bulbs. Ireland will be the first country to implement a ban in 2009 and Australia will phase out incandescent lights by 2010. USA and Canada have also committed to phasing out incandescent lights starting in 2012.

SaniBulb™ Saves Money!

Although the up-front cost of a SaniBulb™ is higher than a standard incandescent bulb, the cost savings over the life of the bulb can be striking since it is much more energy efficient, lasts 10 times longer and it eliminates the need for expensive and harmful chemical based air sanitizers, purifiers and deodorizers. Let's consider a conservative *example for switching to a single SaniBulb™*. Assume that:

- You switch one 100 watt incandescent bulb with a 25 watt SaniBulb™ that produces the same amount of light.
- SaniBulb™ costs \$16.99 and lasts 8,000 hours.

- A standard incandescent bulb costs \$0.50 and lasts 750 hours. Therefore, 10 standard bulbs are required to last as long as the one SaniBulb™ for a total cost of \$5.
- The cost of electricity is \$0.101/kWh which is a 2006 estimate. It is closer to \$0.17 - \$0.20/kWh in areas like the Northeast.
- You currently use about \$60/year chemical based deodorizer, sanitizer or filter consumables which you could eliminate by switching to SaniBulb™. Over the 8000 hour SaniBulb™ life span, it would save \$300.

The life cycle cost & savings break down is as follows:

Item	Incandescent Bulb	SaniBulb™ CFL	Estimated Savings
Bulb Cost(s)	\$5.00	\$16.99	-\$11.99
Operating Cost (energy & maintenance)	\$96.00	\$16.00	\$79.00
Deodorizers/Sanitizers/Filters Cost	\$300.00	\$0	\$300.00
Net Life Cycle Savings			\$367.01

By replacing just one incandescent light bulb with SaniBulb™, you will save over \$350 over the life of that bulb which is over \$70/year. If you replace more bulbs, your savings will be proportionally greater especially when you factor in the AC savings during the hot summer months. In the long run, SaniBulb™ won't cost you money, it will save you money!

Other Benefits from Switching to SaniBulb™

SaniBulbs™ Excellent Light Quality is Warm & Inviting

There is no reason to be concerned about CFL lighting quality anymore. It has been improving dramatically since they were first introduced almost 20 years ago. SaniBulb™ light quality now rivals traditional light bulbs in many applications. They turn on instantly, don't hum, are flicker free and the 2,700K warm white version SaniBulb™ delivers warm inviting light that is indistinguishable from incandescent lights. This is made possible by use of rare earth phosphors for excellent color and warmth. In fact, according to a study performed by Popular Mechanics, CFLs scored higher than incandescent bulbs for overall quality of the light. In other words, CFLs aren't just better for both your wallet and the environment, they produce better light and they don't peek above most lamp shades anymore!

SaniBulb™ is Maintenance Free

Simply replace your old fashioned incandescent light bulbs with SaniBulb™ and forget about them. Since they last for over 8,000 hours, which is ten times longer than incandescent bulbs, you won't have to replace them for a very long time. Imagine cutting down on your trips to buy bulbs and the times you have to change those hard to get to bulbs. Also, since SaniBulb™ is completely quiet, you won't notice the difference while you enjoy your music, TV or share a quiet conversation. So switch to SaniBulb™, sit back and bask in its long lasting, comfortable, energy saving light while it cleans your air.

SaniBulb™ Reduces Fire Hazards

Standard old fashioned incandescent light bulbs are very inefficient. In fact, over half the energy consumed by them produces heat, not light. Your home or business will be safer when you switch to SaniBulb™ since it produces less heat thus reducing fire hazards. This reduction in heat will also cut your AC bills when the weather gets hot.

SaniBulb™ Helps Fight Seasonal Affective Disorder (S.A.D.)

Seasonal Affective Disorder or S.A.D. is a type of 'winter depression' that affects millions of people every year during the winter months. S.A.D. is caused by a biochemical imbalance in the hypothalamus due to the shortening of daylight hours and the lack of sunlight in winter. SaniBulb™ (cool white) can help combat S.A.D and has the added benefit of cleansing your air. According to the National Organization of Seasonal Affective Disorder (NOSAD), light therapy has proven effective in over 80% of diagnosed cases with exposure from 30 minutes to several hours per day to a bright light.

Choosing the Right CFL Bulb

Compact fluorescent light bulbs have come a long ways in both quality and variety since they were first introduced. Gone are the days of poor lighting quality and limited styles. These days, CFL bulbs come in many styles and the quality of the light is better than most incandescent bulbs. To get the best SaniBulb™ for your application, simply choose the correct wattage and color temperature:

Wattage/Light Output

When you purchase SaniBulb™, it's less about trying to figure out how many watts a bulb uses and more about the light output, or lumens generated by the bulb. When choosing the best SaniBulb™ for your application, simply choose the SaniBulb™ replacement from the table below to match your current incandescent light output. For example, if you are looking to replace a 100 watt incandescent light bulb, simply choose the 25 Watt SaniBulb™ replacement. It's as easy as that!

SaniBulb™ Power (Watts)	Output (Lumons)	To Replace Incandescent Bulb (Watts)
15	825	60
20	1,100	75
25	1,500	100

Color Temperature

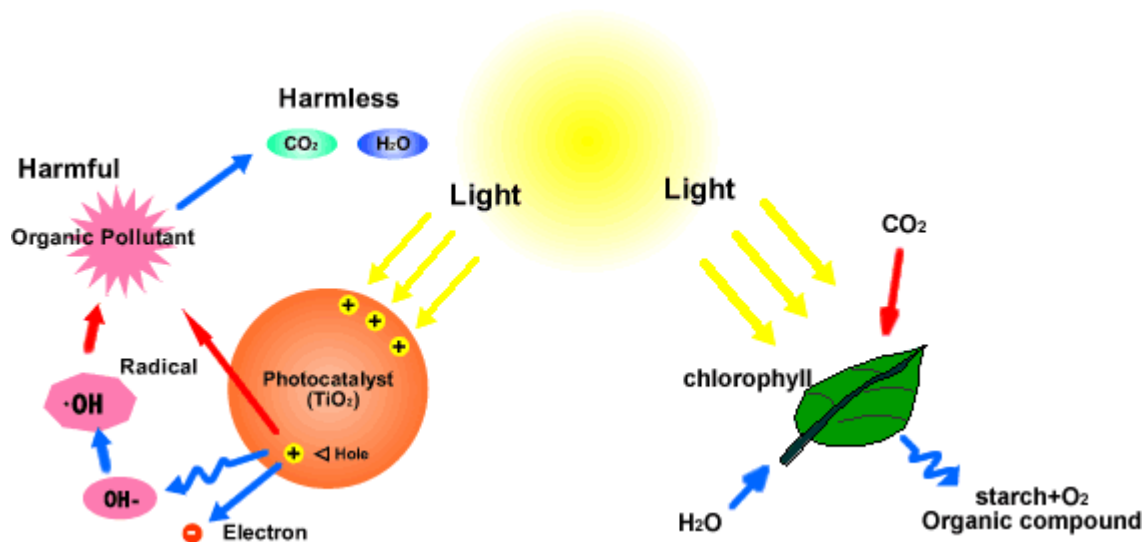
The color temperature of a light bulb can best be described as how the light compares to 'natural' sunlight. Outdoor sunlight has a color temperature of around 5,500K. Bulbs with a higher color temperature (closer to 5,000K) will produce light that is more 'cool' or blue similar to fluorescent tubes. Bulbs with a lower color temperature will produce light that is more 'warm' or yellow like incandescent light bulbs. The color temperature of a light bulb is usually described by how 'white' a bulb is, like 'warm white' and 'soft white'

The most popular residential light bulbs in the US are 'warm white'. We recommend choosing SaniBulb™ with a color temperature of 2,700K bulb for your home if you want to get the same warm effect as incandescent bulbs. If you are in a commercial setting or trying to get the whiter lighting typical of fluorescent light tubes, you should consider choosing the 'cool white' SaniBulb™ with a color temperature of 4700K.

How Does SaniBulb™ Work?

SaniBulb™ combines the energy saving compact fluorescent bulb technology with nano photocatalytic materials and solid state electronic technology to produce a multi-tasking light bulb that sanitizes, purifies and deodorizes the air while providing comfortable lighting. The cleaning power of SaniBulb™ is made possible by a high tech next generation nano coating that acts as a photocatalyst. This means that it harnesses light energy emitted from SaniBulb™ and sunlight to convert oxygen and moisture from the atmosphere to superoxide anions (oxygen with an extra electron) and hydroxyl free radicals. To make SaniBulb™ even more effective, superoxide ions are also produced electronically to complement the photocatalytic function.

The superoxide anions, which are like oxygen on steroids, along with hydroxyl radicals provide sanitizing and cleaning power to destroy and convert germs, chemical contaminants and odors into harmless carbon dioxide (which is expelled during respiration) and water via a powerful process of oxidation. The wonderful thing about a photocatalyst is that it does not get depleted and this cycle continues indefinitely as long as light is available. As an analogy, plants also utilize a photocatalyst called chlorophyll which captures sunlight to convert water and carbon dioxide into oxygen and glucose. This innovative product truly harnesses the power of light and nature to clean your air safely.



Applications

SaniBulb™ can be simply used for effectively sanitizing, purifying and deodorizing your air while saving energy and enjoying warm inviting lighting in many diverse applications such as:

Homes: Kitchens, dining rooms, bathrooms, bedrooms, closets, basements, living areas, pet areas, garages, new construction odors, furniture emissions, cooking smells, carpeting, diapers, paint, chemical contaminants, fragrances, mold, mildew

Medical: Medical offices, hospitals, hospices, clinics, morgues, autopsy rooms, funeral homes, nursing homes, operating rooms, patient rooms, isolation rooms, waiting rooms, veterinarian clinics, elevators, bathrooms

Food: Restaurants, cafeterias, bars, kitchens, bathrooms, food processing plants

Hospitality: Hotels, motels, resorts, spas, casinos, apartments, guest rooms, bathrooms, gyms, bars, restaurants, common areas

Commercial: Gyms, offices, day care facilities, labs, storage facilities, new construction, warehouses, printing, manufacturing facilities, bathrooms

Retail: Supermarkets, pet stores, pet grooming, nail salons, tanning salons, hair salons, retail stores, new construction, bathrooms

Educational: Schools, colleges, universities, libraries, bathrooms

Directions

Since SaniBulb™ fits into any standard light bulb socket, you can use it throughout your entire home and business in table lamps, floor lamps, ceiling fixtures, wall sconces and pendants. It's perfect for any area requiring automatic air sanitizing, purification or deodorizing without the use of harmful chemicals.

For best results, use one SaniBulb™ for every 100 square feet and install more as needed for areas with severe indoor air pollution problems. When used with a three-way switch, SaniBulb™ should be used at the highest setting for maximum effectiveness. Do not use SaniBulb™ with a dimmer switch or in an enclosed fixture.

Disposal

When SaniBulb™ burns out years from now, simply recycle them properly like any other fluorescent light, to minimize the environmental impact. To find a CFL recycling center near you, simply call 1-800-CLEAN-UP or go to earth911.org or lamprecycle.org

Order Risk Free

When you purchase SaniBulb™, you do so at absolutely no risk. It comes with a 100% satisfaction guaranteed warranty. If it fails to perform according to its specifications or is defective, we will replace it immediately.

Code	Description	Carbon Footprint Reduction/Bulb*	Price (\$)
10001	SaniBulb™ 15 Watt Warm White (2700 K): 60 Watt Incandescent Bulb Replacement.	672 Lbs CO ₂ /Bulb	14.99
10002	SaniBulb™ 20 Watt Warm White (2700K): 75 Watt Incandescent Bulb Replacement.	840 Lbs CO ₂ /Bulb	15.99
10003	SaniBulb™ 25 Watt Warm White (2700K): 100 Watt Incandescent Bulb Replacement.	1,121 Lbs CO ₂ /Bulb	16.99
10004	SaniBulb™ 15 Watt Cool White (5700K): 60 Watt Incandescent Bulb Replacement.	672 Lbs CO ₂ /Bulb	14.99
10004	SaniBulb™ 20 Watt Cool White (5700K): 75 Watt Incandescent Bulb Replacement.	840 Lbs CO ₂ /Bulb	15.99
10005	SaniBulb™ 25 Watt Cool White (5700K): 100 Watt Incandescent Bulb Replacement.	1,121 Lbs CO ₂ /Bulb	16.99

- *Carbon Footprint Reduction/Bulb = Lbs CO₂ Reduced/SaniBulb™ + Lbs of FREE Carbon Offset/SaniBulb™
- CO₂ = Carbon Dioxide

IMTEK Environmental Corporation

IMTEK Environmental Corporation, headquartered in Atlanta, GA, is a trusted global provider of over 300 innovative environmentally friendly products and safety services. Our company is a pioneer and market leader in developing Innovations for a Greener, Safer & Healthier & Life & Planet SM such as the innovative new SaniBulb™, SaniLite™, and SaniGuard™ Air Sanitizers, Purifiers and Deodorizers which utilize revolutionary state of the art nano photocatalytic technology. For further information, please contact IMTEK, PO BOX 2066, Alpharetta, GA 30023; Telephone (770) 667-8621; Fax (770) 667-8683; E-mail service@sanibulb.com; Web: www.sanibulb.com.

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