



**Driving a car can be a typical person's most toxic daily activity!**



**NanoBreeze® Car Air Purifier**  
Snaps onto the front dashboard vent.  
Air circulating inside of the car is cleaned by photocatalytic oxidation.  
Uses a patented 5W NanoTube™.  
Includes a 12-Volt power adapter that plugs into any vehicle cigarette lighter.



**NanoBreeze® Mini Car Air Purifier**  
Perfect for sub-compact vehicles or any vehicle with narrow dashboard vents.  
Uses two special semiconductor light sources that operate for 30,000 hours = FOUR YEARS OF CONSTANT USE!  
Includes a 12-Volt power adapter that plugs into any vehicle cigarette lighter.



## Product Specifications

### NanoBreeze® Car Air Purifier

### NanoBreeze® Mini Car Air Purifier

Model:

PB-006-004

VB-003-011B

Input voltage:

12 VDC

12 VDC

Power consumption:

5.5 Watts

0.05 Watts

Air cleaning rate: ●

**>99.9%**

>70.0%

Width:

6.0 in.

1.0 in.

Height:

2.5 in.

2.0 in.

Light source type:

patented fluorescent

semiconductor

Light source life:

3,000 hours

**30,000 hours**

● reduction of airborne microbes in 8m<sup>3</sup> after 25 minutes

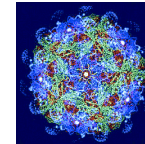
## NanoBreeze Does Not Collect Airborne Contaminants... It Eliminates Them!

### Benefits of Photocatalytic Nanotechnology

- Kills Germs
- Decomposes Toxic Gases Including Volatile Organic Compounds
- Removes Odors
- No Filters to Clean or Replace; So No Frequent Maintenance Is Required

### The NanoBreeze Eliminates

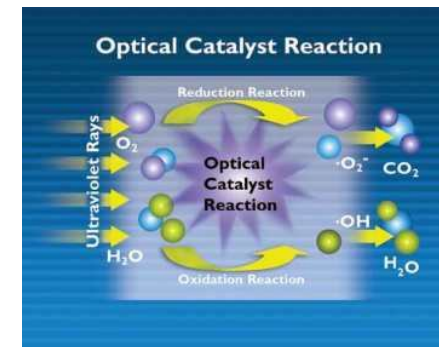
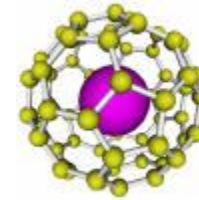
- Mold Spores
- Bacteria
- Pollen
- Exhaust Fumes
- Cigarette Smoke
- Viruses



## How It Works...

***Nanotechnology is the design, manufacture or control of single molecules to perform the duties of a machine.*** The patented NanoTube™ is an air cleaning filter activated by light.

- Titanium dioxide (TiO<sub>2</sub>) crystals, only 40 nanometers in size, form a molecular machine powered by light. TiO<sub>2</sub> is a semiconductor charged by ultraviolet photons.
- Charged nanoparticles produce powerful oxidizing agents called hydroxyl radicals. These free radicals destroy airborne germs and pollutants that circulate over the surface of the patented light tube inside the NanoBreeze Room Air Purifier.
- Airborne pollutants are turned into water vapor (H<sub>2</sub>O) and carbon dioxide (CO<sub>2</sub>) through reduction and oxidation reactions.



## FAQ...

### **Do NanoBreeze Air Purifiers produce ozone?**

The NanoBreeze Air Purifiers produce NO OZONE unlike many other air purifiers on the market. Indoor ozone is a lung irritant that can worsen asthma, deaden sense of smell, raise sensitivity to pollen and mold, and may even cause permanent lung damage.

### **Is there any UV caution or advisory for the NanoBreeze?**

No! The soft blue glow from the NanoBreeze Air Purifiers is not harmful. NanoBreeze Air Purifiers generate NO skin or eye hazards from ultraviolet radiation (UV), unlike some air purifiers that may use Germicidal type UVC light tubes.

### **Will it fit in my car?**

Any NanoBreeze Car Air Purifier comes with adjustable clips that will attach to the grill of any dashboard vent. Both models plug into the cigarette lighter in any vehicle.

### **Do the NanoBreeze Car Air Purifiers produce electromagnetic or radio interference (EMI)?**

No! Both NanoBreeze car products comply with automotive industry standards for "in vehicle use" electronics and produce no EMI. Ionizers especially may produce EMI.

### **Does the NanoTube™ need to be replaced?**

The NanoTube light tube is the air cleaning component of the NanoBreeze Car Air Purifier. It is expected to operate for one year with normal use. Replacement light tubes are sold separately.



# Shipping and Pricing

Product Description	Units	NanoBreeze® Car Air Purifier	NanoBreeze Car Air Purifier	NanoBreeze Mini Car Air Purifier	NanoBreeze Mini Car Air Purifier
Product Code		PB-006-004-B	PB-006-004-G	VB-003-011B	VB-114-114W
Product Color		Black	Gray	Gray	Walnut
UPC Code (GTIN)		181469000012	181469000029	181469000071	181469000081
Package Dimensions	in	8.1 (H) x 7.6 (W) x 2.0 (D)	8.1 (H) x 7.6 (W) x 2.0 (D)	6.8 (H) x 3.3 (W) x 1.3 (D)	6.8 (H) x 3.3 (W) x 1.3 (D)
Package Weight	oz	20.3	20.3	3.3	3.3
Case Quantity	pcs	20	20	100	100
Case Dimensions	in	57.0 (H) x 48.0 (W) x 42.0 (D)	57.0 (H) x 48.0 (W) x 42.0 (D)	14.6 (H) x 14.6 (W) x 16.5 (D)	14.6 (H) x 14.6 (W) x 16.5 (D)
Case Weight	lbs	27.5	27.5	21.0	21.0
MSRP	each	\$69.99	\$69.99	\$26.99	\$26.99
FOB Nashua, NH	each	\$44.00	\$44.00	\$16.00	\$16.00
Drop Ship Fee	each	\$1.50	\$1.50	\$1.50	\$1.50

Payment Terms      days      Net 30, 2% Net 10  
 Domestic Lead Time (FOB      days      7  
    Nashua, NH)

## The NanoBreeze Family...

### Room Air Purifier

Decomposes indoor air pollution. Can operate one full year with no need for owner maintenance. No filters to replace and no cleaning required.



### Replacement NanoTubes™

Replacement tubes when needed for the Room Air Purifier and the Car Air Purifier.



### Car Air Purifier

Snaps onto the front dashboard vent. Uses a 12-Volt power adapter that plugs into any vehicle cigarette lighter.



### Mini Car Air Purifier

Perfect for sub-compact vehicles or narrow dashboard vents. Uses two semiconductor light sources that operate for 30,000 hours.



## Who Are We?

**NanoTwin Technologies** is a manufacturer of portable air purifiers based on patented photocatalytic Nanotechnology sold under the NanoBreeze® brand.

The **Photocatalytic Nanotechnology** on which NanoBreeze air purifiers are based is the result of over 30 years of worldwide research and development.

**Did You Know...Forbes Magazine** named the NanoBreeze Room Air Purifier as one of the Top 10 Nanotech Products of 2005! The distinguished list also included:

- *Apple® Computer's "iPod Nano"*
- *Behr® brand "NanoGuard" paints*



## The NanoBreeze Does Not Collect Airborne Contaminants... It Eliminates Them!

### Benefits of Photocatalytic Nanotechnology

- Kills Germs
- Decomposes Toxic Gases Including Volatile Organic Compounds
- Removes Household Odors
- No Filters to Clean or Replace; So No Frequent Maintenance Is Required

### NanoBreeze Features

- Whisper-quiet, 3-speed fan returns clean air into the room
- Rotating front grill maximizes air circulation
- Highly portable
- Tilts to direct air flow upward or downward as needed
- 5,000 hour life bulb



## Why It's Better ...

### **NO MAINTENANCE**

Since the The NanoBreeze<sup>®</sup> destroys rather than collect airborne contaminants. It has no messy, expensive filters to change or plates to clean. Expected bulb life is 5,000+ hours



### **SAFE TO USE**

The NanoBreeze does NOT generate Ozone or hazardous UV light unlike many competitive air purifiers. The TiO<sub>2</sub> fiberglass covering absorbs and uses the UVA radiation produced by the fluorescent light tube.

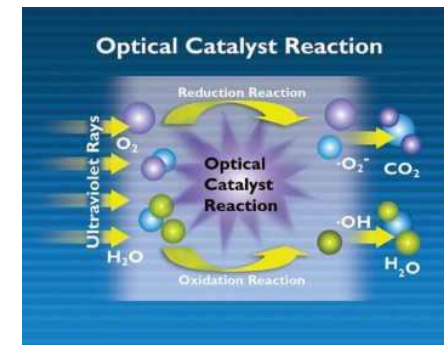
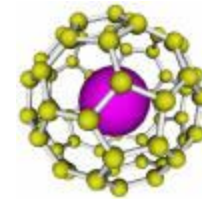
The EPA does not recommend using Ozone generators.



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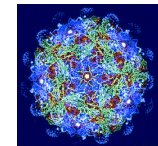
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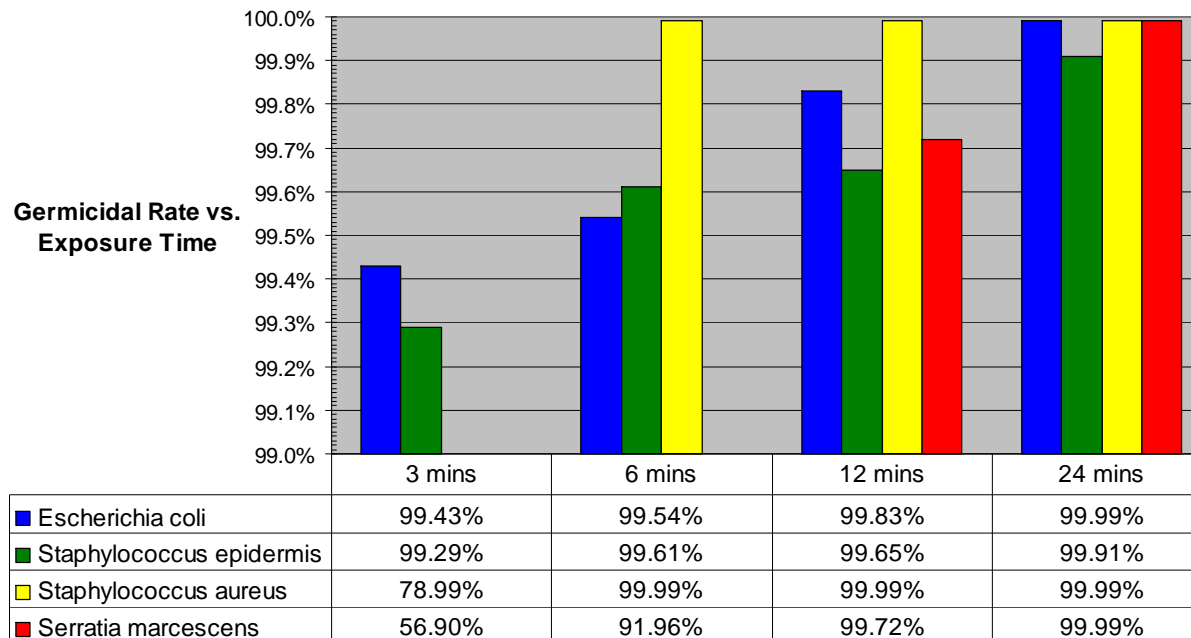
The NanoBreeze helps to eliminate:

- *Mold Spores*
- *Bacteria*
- *Pollen*
- *Toxic Gasses*
- *Viruses*



## Supporting Data...

**Germ**s – NanoBreeze destroys over 99.9% of germ colonies in just a few minutes. Tests were performed on four types of bacteria that commonly produce infection in humans.



### TEST METHOD

Special membranes are coated with the NanoBreeze® photocatalyst. Bacteria laden water is applied to the membrane which incubates for 18 hrs @ 37°C. The bacteria level is measured before and during exposure to indirect UVA light that activates the photocatalyst.

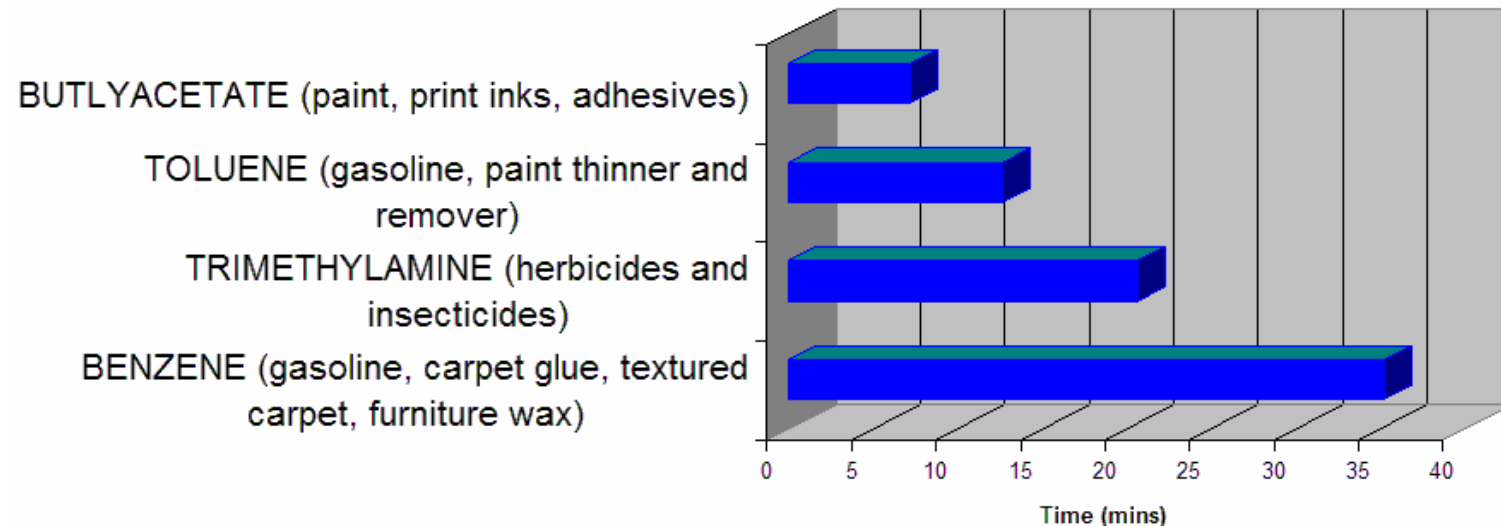
### RESULTS

*The NanoBreeze photocatalyst destroys over 99.9% of germ colonies in just a few minutes.*

## Supporting Data...

**VOCs** – NanoBreeze decomposes harmful vapors and gasses released during evaporation, especially from manufactured products. VOC concentration is reduced by tenfold in minutes.

### Time to 90% Decomposition of Volatile Organic Compounds (VOCs)



### TEST METHOD

The NanoBreeze® patented light tube is mounted inside a test chamber. Air mixed with a VOC is injected. VOC concentration is measured before and after exposure to the activated light tube.

### RESULTS

*The NanoBreeze reduces VOC concentrations significantly within minutes.*

# Indoor Environment Testing...

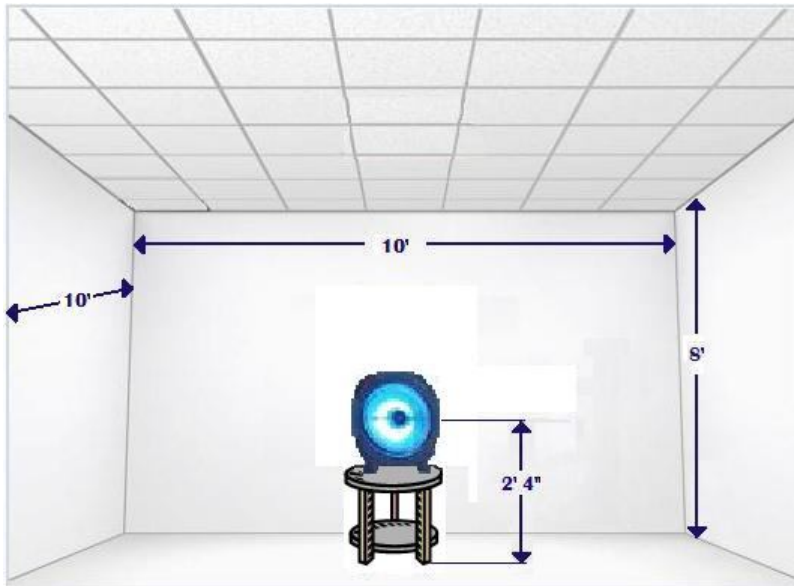


## Bacteria

### TEST METHOD

The NanoBreeze Room Air Purifier is mounted on a table in a center of a room. Its centerline is 2 ft 4 inches from the floor. The room volume is 800 cubic feet.

- The NanoBreeze is operated "fan only" at medium speed and front grill rotating. The NanoTube™ light tube is kept OFF. After 1 hour, a sample of room air is collected.
- The NanoTube light tube is switched ON. Samples of room air are taken 3 hours and 6 hours later.
- Bacteria from all samples of room air are cultured under identical conditions. Bacteria amounts are counted with a microscope as Colony Forming Units per sampled air volume.

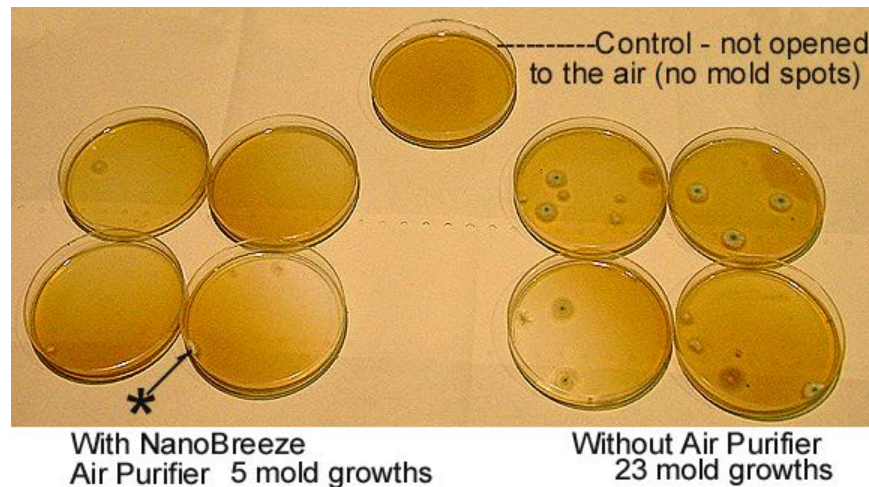


### RESULTS

Treatment Time (hrs)	Bacteria Level (CFU/m <sup>3</sup> )	Bacteria Reduction (%)
0 (fan only)	1163	0.0%
3	230	80.2%
6	122	89.5%

## Indoor Environment Testing...

**Mold** – NanoBreeze Destroys airborne mold spores and inhibits mold growth as illustrated below.



### TEST METHOD

Petri dishes were prepared with chicken broth in gelatin. The dishes were stored at room temperature.

- A control dish was immediately covered and sealed to be airtight.
- The four dishes on the right were exposed to room air for one hour then covered and sealed airtight.
- The four dishes on the left were exposed to room air with a NanoBreeze® operating at ten feet away for one hour before being covered and sealed airtight.
- After five days, the number of mold growths were counted. (\*indicates a break in the seal)

### RESULTS

*The NanoBreeze reduces mold growth by destroying airborne mold spores.*

## FAQ...

### **Does this really use Nanotechnology or it is just part of the name?**

Yes, it uses Nanotechnology. The principle behind the NanoBreeze requires the use of semiconductor crystals that are only 40 nanometers in size.

### **How does the NanoBreeze compare to ionic air cleaners?**

Ionic air cleaners use high-voltage to charge dust particles passing through them. Dirt collects on metal plates that need to be cleaned on a weekly basis. Many popular models are not recommended by consumers' groups for failing to clean the air and releasing potentially unhealthy levels of ozone.

### **Is the NanoBreeze like the other Ultraviolet air purifiers?**

No! Ultraviolet or UV air purifiers use "Germicidal type UVC" radiation to kill germs by destroying their DNA. UVC radiation is hazardous to all living things. The NanoBreeze uses UVA to activate the photocatalyst embedded inside the fiberglass mesh which absorbs the ultraviolet. Using photocatalytic oxidation, the NanoBreeze kills germs AND decomposes vapors or gases. Germicidal UVC air purifiers do not remove gases and, like ionizers, may produce dangerous levels of ambient ozone.

### **Does the NanoBreeze Air Purifier produce ozone?**

The NanoBreeze Air Purifiers produce NO OZONE unlike many other air purifiers on the market. Indoor ozone is a lung irritant that can worsen asthma, deaden sense of smell, raise sensitivity to pollen and mold, and may even cause permanent lung damage.

### **Is there any UV caution or advisory for the NanoBreeze?**

No! The soft blue glow from the NanoBreeze Air Purifiers is not harmful. NanoBreeze Air Purifiers generate NO skin or eye hazards from ultraviolet radiation (UV), unlike some air purifiers that may use Germicidal type UVC light tubes.

### **Does the light tube need to be replaced?**

The light tube is expected to operate for one year with normal use. It is the air cleaning component of the NanoBreeze Air Purifiers. Replacement light tubes are sold separately.

## Conclusion...

- Only **NanoBreeze's** patented Nanotechnology will oxidize and reduce both *airborne biologicals* and *VOC gases*!
- HEPA filter-based air purifiers capture particles rather than oxidize airborne contaminants. Changing filters is dirty and imposes a high cost of ownership. Many are noisy and do not adsorb odors and gases.
- Ionic air cleaners electrostatically charge dust particles. The particles deposit and soil room surfaces. Metal plate collectors need to be cleaned weekly. Many fail to clean the air and release unhealthy levels of ozone.
- Ultraviolet or UV air purifiers use Germicidal type UVC radiation to kill germs by destroying their DNA. UVC is hazardous to all living things. Germicidal UV air purifiers do not remove gases and can produce ozone.

*Why Collect Harmful Airborne Contaminants When You Can Eliminate Them With NanoBreeze.*



## Everyone Loves the NanoBreeze!

Wow, the NanoBreeze really works better than my old ionic breeze air purifier!

- James, Poughkeepsie, NY

This little unit removed the mold smell from my whole basement. I bought a second for our RV.

- Sarah, Detroit, MI

We have had the unit running in our apartment NYC for several weeks. We have been involved in remodeling and have noticed a drastic decrease in congestion when we wake in the morning. I know they say this is not a dust collecting unit but it has done wonders for the way we felt when we get out of bed in the morning. GREAT PRODUCT, WE LOVE IT.

-Barry, New York, NY

I bought the NanoBreeze for my son who had been suffering from severe allergies. Since we the unit in his room he has been able to sleep through the night. It almost sounds to good to be true but it really works.

-Tiffany, West Des Moines, IA

My wife purchased the NanoBreeze to help control the damp, musty smell in our basement. We constantly were running dehumidifiers but it never seemed to help with the musty smell. Since we started running the NanoBreeze our basement smells clean and fresh. Great Product. Thumbs UP!

-Michael, White Plains, NY

The NanoBreeze reduced my asthma symptoms at home so well that my boss bought one for our office.

-Nancy, Danvers, Ma

I bought other air purifiers in the past and had to return them. The ozone odor was too strong. I am very happy with the NanoBreeze.

-Edna, Chillicothe, OH