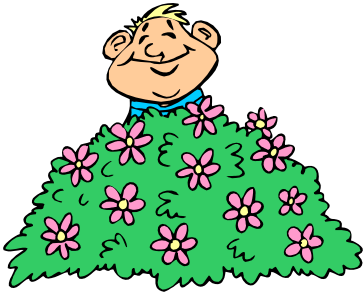


## What is the Product

*NanoBreeze™ by NanoTwin Technologies*

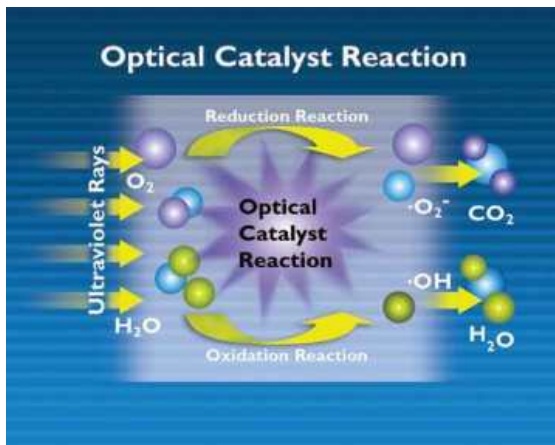


## What's nano about it?

- NanoBreeze™ uses nanoparticles of titanium dioxide crystals that are 40 nanometers in size to form a molecular machine powered by light.

## How does it work?

- The air purifier destroys all types of airborne contaminants on a molecular level.
- When the titanium dioxide nanoparticles are charged, powerful oxidizing agents called hydroxyl radicals are produced.
- These hydroxyl radicals destroy airborne germs and pollutants that encounter the NanoTube inside the NanoBreeze™.
- The NanoTube is an air filter activated by light



The process is known as oxidation by *photocatalysis*, from combining the Greek words for *light* and *dissolve*. Airborne pollutants are turned into water (H<sub>2</sub>O) and carbon dioxide (CO<sub>2</sub>) through reduction and oxidation reactions.

Source: <http://www.nanotwin.com>

## Does it have other applications?

- No

### Price

- NanoBreeze™ Car Purifier costs \$29.97

### Glossary

- Nanoparticle - a particle with at least one dimension of less than 200 nanometers.
- Titanium dioxide is a photocatalyst under ultraviolet light
  - it speeds up a photo reaction
- Oxidation is the loss of an electron by a molecule, atom, or ion
- Reduction describes the gain of an electron by a molecule, atom or ion.

This information came from:

[Http://www.nanotwin.com](http://www.nanotwin.com)

Definitions came from:

<http://en.wikipedia.org/wiki/Main.page>