

Mitigate Ethylene Gas

Prevent Premature Ripening

Inhibit Mold & Bacterial Contamination

■ **Zentox Pure Air** reduces produce spoilage by destroying airborne mold, mildew, fungus, bacteria, and ethylene gas through its proprietary Photocatalytic Oxidation (PCO) technology without creating hazardous waste.

■ **Mitigate Ethylene Gas**
Zentox Pure Air utilizes a specialized PCO catalyst for ethylene reduction. Ethylene is a key chemical associated with the ripening process. The removal of ethylene gas from fresh produce cold storage rooms is critical for preventing premature ripening and prolonging shelf life. The **Zentox Pure Air** catalyst is extremely powerful in breaking down double bonded carbons in VOCs like ethylene.

■ **Contain Cross-Contamination**
 Airborne mold, mildew, fungus, and bacteria are perilous during post-harvest storage of fresh fruits and vegetables. Cross contamination is a significant threat that will lead to additional waste and returns. **Zentox Pure Air** molecularly destroys these pathogens 40% more efficiently and at half the capital equipment cost than the leading PCO competitor. (1)

■ **Proven Real World Performance**
 Precision Indoor Air Quality Testing at a large, fully operational, and bustling cold storage facility has demonstrated that **Zentox Pure Air** molecularly destroys mold, mildew, fungus and bacteria 40% more efficiently due to its proprietary infusion of titanium dioxide nanoparticles into our catalyst module which then creates countless reaction sites vastly increasing molecular destruction efficiency. Increased efficiency results in a lower cost per cubic foot of coverage.

■ **No ozone** – **Zentox Pure Air** systems are California Air Resource Board approved for meeting ozone emission safety standards. **Zentox Pure Air** systems can be shipped anywhere. 220 Volt option is available upon request.

■ **Size Matters** – **Zentox Pure Air** will destroy even the smallest of microbes, well below the typical 0.3 microns. **Zentox Pure Air** ultimately breaks down viruses, bacteria, and mold, to harmless amounts of carbon dioxide, water and minuscule trace elements.

■ **Built to last** – The unit is made of anodized aluminum and employs an industrial strength fan. There no plastic components that can be degraded in the presence of UV light.

Certifications

- California Air Resource Board for ozone emissions
- ETL & CSA for electrical safety in conformance with UL standards
- EPA Establishment Number



Features & Benefits:

Oxidized Microorganisms: destroyed

Ethylene Levels: contained

Waste Disposal: none

Safe to use: no ozone, no harmful air contaminants are emitted

Easy to use: simply turn on and let it run

Power consumption: low

ZENTOX
PURE AIR



Zentox Pure Air 500

Eliminates airborne...

ETHYLENE

MOLD SPORES & FUNGI

Black Mold, Gray Mold, Botrytis, Yellow Mold, Aspergillus/Penicillium, Basidiospores, Cladosporium, Epicoccum

VOLATILE ORGANIC COMPOUNDS

Methane, Nitrogen Dioxide, Benzene, Toluene, Solvents, Paints, Moth Balls, Cleaning & Disinfecting Chemicals

BACTERIA

MERSA

VIRUSES

H1N1, SARS-CoV-2

CARBON MONOXIDE



Zentox Pure Air 500 CS

The Zentox Advantage

How the technology works

STEP

1

A fan delivers air through a fibrous glass media coated with fumed titanium dioxide and a proprietary blend of novel catalytic reaction materials.

STEP

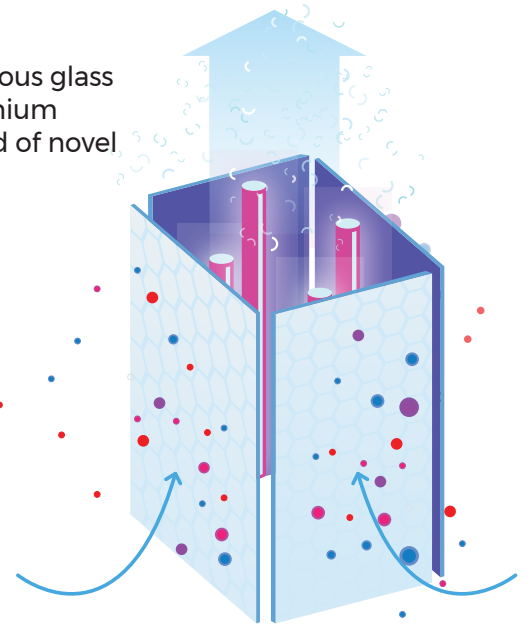
2

The catalyst is activated by UV light.

STEP

3

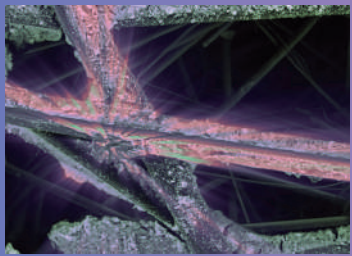
Airborne pathogens, odors, and micro bacteria, are oxidized in the catalytic media.



Untreated fibrous glass mat at 1,000 times magnification



Infused fibrous glass mat at 100 times magnification



Infused fibrous glass mat at 1,000 times magnification

What's Inside?

Inside the **Zentox Pure Air** case is a proprietary Catalyst Reaction Module that contains fumed titanium dioxide nanoparticles as well as a proprietary mix of novel catalysts, embedded in a fibrous glass media. The permeated fibrous glass media creates a tortuous path for airborne contaminants: ethylene, mold, mildew, fungi, bacteria, allergens, as well as volatile organic compounds. Airborne contaminants, like ethylene, mold, and bacteria, come into contact with **Zentox Pure Air** reaction sites activated by UV light and they are molecularly broken down to harmless carbon dioxide, water, and its trace elements. Additionally, due to the proprietary blend of catalyst, the **Zentox Pure Air** system oxidizes contaminants not affected by titanium dioxide alone, like ethylene and carbon monoxide.

Embedding catalyst of fumed titanium dioxide nanoparticles, via a proprietary process into a fibrous glass media, vastly increases the number of molecular reaction sites that lead to dramatically improved performance and efficiency.

Powerful airflow rates allow **Zentox Pure Air** systems to process ambient air up to 500 cubic feet per minute, insuring continuous pure air.

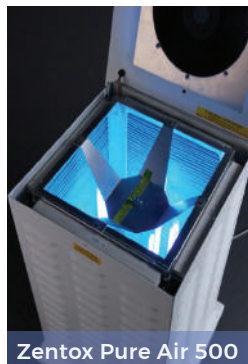
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Zentox Pure Air 500



Catalytic Reaction Module



¹Four Seasons Produce and Zentox Corporation real world six-week study of airborne contaminants in FSP's working cold storage facility.