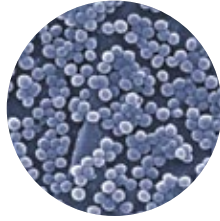
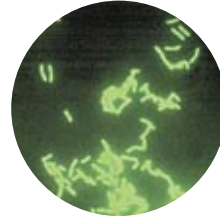




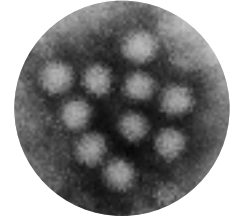
E Coli



MRSA



Legionella



Norovirus

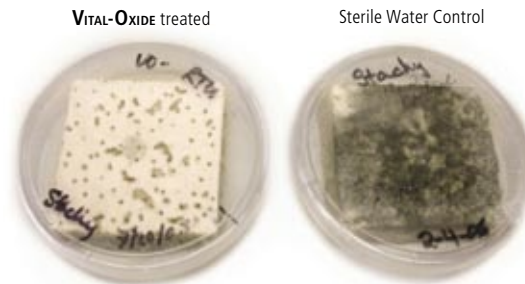
Anti-Microbial Action

Proven effective against MRSA, Norovirus, *Legionella pneumophila*, and *E coli* in testing conducted by certified independent laboratories under GLP conditions submitted to the USEPA. **VITAL-OXIDE** is a broad-spectrum antimicrobial that performs against a wide variety of bacteria, yeasts, viruses, fungi, spores, molds, mildews and other microbes. It is very effective at low concentrations, over a wide pH range.

PREVENTS MOLD & MILDEW ON HARD SURFACES & FABRIC

Results of University of Tulsa Study: Effectiveness of VITAL-OXIDE for Controlling Fungal Contamination on Building Materials

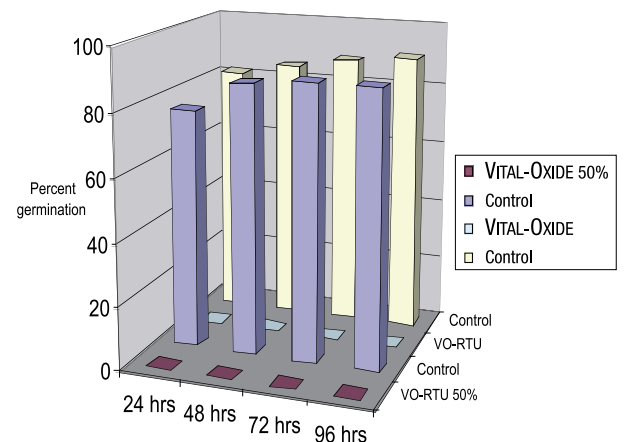
- **VITAL-OXIDE** inhibited spore germination of test fungi
- Pretreatment with **VITAL-OXIDE** inhibited the growth of fungi on sheetrock and ceiling tiles
- Spray applications of **VITAL-OXIDE** were effective in stopping fungal growth even in saturated conditions



Pretreatment of ceiling tiles with **VITAL-OXIDE** inhibited growth of *Stachybotrys* 7 months following treatment.

Fungi	Mean colony diameter (cm) of fungi after 30 days incubation on sheetrock saturated with VITAL-OXIDE "Ready To Use" (RTU) or sterile water Control		
	Control	VO - RTU	50% RTU
<i>Alternaria alternata</i>	>6.0	0	0
<i>Aspergillus fumigatus</i>	>6.0	0	0
<i>Aspergillus versicolor</i>	3.6	0	0
<i>Chaetomium globosum</i>	>6.0	0	0
<i>Penicillium sp.</i>	>6.0	0	0
<i>Stachybotrys chartarum</i>	>6.0	0	0

VITAL-OXIDE Treated Sheetrock Exhibits No Fungal Growth Even in Saturated Conditions



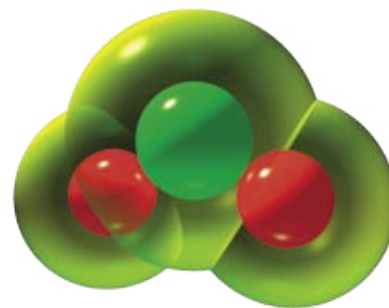
Percent Germination of *Stachybotrys* Spores

VITAL-OXIDE® USES THE POWER OF OXYGEN

KILLS HARMFUL BACTERIA & VIRUSES & REMOVES MOLD & MILDEW

THE TECHNOLOGY

The chlorine dioxide molecule has one chlorine atom and two oxygen atoms. This combination creates a molecular free radical—a magnetic like attraction that seeks out electron donors and selectively oxidizes harmful bacteria and mold.



THE ENVIRONMENTALLY SOUND ALTERNATIVE TO CHLORINE BLEACH

Although chlorine dioxide (ClO₂) has chlorine in its name, its chemistry is radically different from that of chlorine itself. Technically speaking both chlorine and ClO₂ are oxidizing agents. Yet these fundamentally different chemistries react in distinct ways with organic compounds resulting in very different by-products.

STABILIZED ClO₂

VS

CHLORINE BLEACH

- ClO₂ is not a metabolic toxin and will not aid in developing antibiotic resistance in bacteria.
- ClO₂ and its primary by-product chlorite, break down to sodium chloride (simple salt).
- ClO₂ works through Highly Selective Oxidation, reacting with vital amino acids in the cell to eliminate bacteria, viruses and denature proteins, while being relatively un-reactive to other organic material—thus reducing the level of ClO₂ required to do the job.

- Chlorine produces harmful by-products (THM) trihalomethanes and (HAAS) haloacetic acids which are linked to cancer.
- Chlorine is highly corrosive to tissues and treated articles.
- Chlorine has a poor shelf life & stability.
- Chlorine has strong unpleasant odor.
- Chlorine's large molecule can't penetrate porous surfaces thus making it ineffective against mold mycelia (roots).

THE HISTORY

ClO₂ has been recognized for its powerful disinfecting properties since the early 1900's. It is used by municipalities to purify drinking water. Environmentalist now recommend its use in eco-friendly paper production. Produced on site, these treatments require sophisticated chemical generation equipment and limit practical use to only large scale industrial operations.

In an effort to commercialize ClO₂ for the general public several companies have developed methods to produce "stabilized ClO₂". These products usually require a two-step process mixing an acid "activator" into a chlorite solution to produce ClO₂. Yet, even though products claim to have even the same amount of this key ingredient it certainly can not be assumed that they will perform in an equal manner. The results are solutions of varying strength—and safety—with a shelf life of a few days to just a few hours.

THE BREAK THROUGH

VITAL-OXIDE is a super effective, ecologically sound cleaner & odor eliminator, with proven broad-spectrum anti-microbial action. (USEPA registered #82972-1) Shelf stable & Ready To Use—no mixing required, just spray, wipe, or fog right from the bottle. Non-irritating to the skin, and not corrosive to treated articles.