

Ozone Effects on Specific Bacteria, Viruses and Molds

Bacteria are microscopically small, single-cell creatures having a primitive structure. The bacteria body is sealed by a relatively solid-cell membrane. Ozone interferes with the metabolism of bacterium-cells, most likely through inhibiting and blocking the operation of the enzymatic control system. The ozone in Bio-Turbo's Reaction Chamber breaks through the cell membrane, and this leads to the destruction of the bacteria.

Viruses are small, independent particles, built of crystals and macromolecules. Unlike bacteria, they multiply only within the host cell. They transform protein of the host cell into proteins of their own. Ozone destroys viruses by diffusing through the protein coat into the nucleic acid core, resulting in damage of the viral RNA. Inside the Reaction Chamber, ozone destroys the capsid, or exterior protein shell by oxidation so DNA (deoxyribonucleic acid), or RNA (ribonucleic acid) structures of the micro-organism are affected.

Miatech uses the positive effects of ozone to destroy any bacteria and viruses inside the Bio-Turbo's Reaction Chamber. Ozone is extremely effective with 99.99% effective rate but should be treated carefully. With the Miatech design no ozone escapes into the environment and ozone is safely contained within the unit and we are able to make use of this powerful deterioration agent without it ever leaving the inside of the Reaction Chamber.

Pathogens destroyed by ozone

- Aspergillus Niger (Black Mount)
- Bacillus Bacteria
- Bacillus Anthracis: causes anthrax in sheep, cattle and pigs, also a human pathogen).
- Bacillus Cereus
- Bacillus Cereus spores
- Bacillus Subtilis
- Bacteriophage F2
- Botrytis Cinerea
- Candida Bacteria
- Clavibacter Michiganense
- Cladosporium
- Clostridium Bacteria
- Clostridium Botulinum Spores: it's toxin paralyzes the central nerve system, being a poison multiplying in food and meals).
- Coxsackie Virus A9
- Coxsackie Virus B5
- Diphtheria Pathogen
- Eberth Bacillus (Typhus Abdominalis): spreads typically by aqueous infection and causes typhoid.
- Echo Virus 29: the virus most sensitive to ozone.
- Enteric Virus
- Escherichia Coli Bacteria (from feces)
- E-coli
- Encephalomyocarditis Virus
- Endamoebic Cysts Bacteria
- Enterovirus Virus
- Fusarium Oxysporum f.sp. Lycopersici
- Fusarium Oxysporum f.sp. Melonogea
- GDVII Virus
- Hepatitis A Virus
- Herpes Virus
- Influenza Virus
- Klebs-Loffler Bacillus
- Legionella Pneumophila
- Listeria Monocytogenes (air)
- Luminescent Basidiomycetes: species having no melanin pigment.
- Mucor Piriformis
- Mycobacterium Avium
- Mycobacterium Foruitum
- Penicillium Bacteria
- Phytophthora Parasitica
- Poliomyelitis Virus
- Poliovirus Type 1
- Proteus Bacteria
- Pseudomonas Bacteria
- Rhabdovirus Virus
- Salmonella Bacteria
- Salmonella Typhimurium
- Schistosoma Bacteria
- Staph Epidermidis
- Staphylococci
- Stomatitis Virus
- Streptococcus Bacteria
- Verticillium Dahliae
- Vesicular Virus
- Vibrio Cholera Bacteria
- Vicia Faba Progeny

