



STEAM DISINFECTION TECHNOLOGY

By C. Mathew Hall, *Environmental Risk Manager*



Before we get into the subject matter of **Dry Vapor Steam** and its Disinfection attributes, I thought I would mention a disinfection technology that has to do not with vapor steam, but of light. It seems that few are aware of this research. With that being said, let me shed some light on the situation.

It's referred to as HINS-Light, which is a narrow spectrum of visible-light wavelengths that excite molecules within and eradicate these microorganisms or more commonly known as germs; or referred to as pathogens. As a result, the HINS LIGHTING SYSTEM decontaminates the air and exposed surfaces by bathing them in a narrow spectrum of visible-light wavelengths. Thus, killing some of the most virulent pathogens found in hospitals and nursing homes, such as methicillin-resistant Staphylococcus aureus, MRSA, and Clostridium difficile; known as C.diff.

Truth be told, that old saying "An ounce of prevention is worth..." well it's more like a few ounces and closer to the sum of 2 liters. Water that is! Using **Nano-Technology** and regular tap water, known as **TANCS®**, when using a Dry Vapor Steam Cleaner equipped with this technology, gives you more than an hour of saturated steam in the neighborhood of 166 °C or 330 °F. What that means, is Germs are unable to survive under the heat and pressure as they're being "Nano-Bombed" on a microcellular level. As the owner of this proprietary technology explains; **TANCS®** removes ionic minerals from common tap water or any potable water and converts them to millions of Nano crystals. The **Nano crystals** are energized by heat to help destroy bacteria, molds and pathogenic germs by disrupting the cell membranes of microbes. This disruption enables the heated steam vapor to quickly access and impair cell proteins so they can no longer support the growth or reproduction of the affected microbe. Germs are effectively and promptly destroyed.

To **disinfect** means to eliminate most harmful microorganisms (not including their spores) from surfaces or objects; inactivate viruses. To **sterilize** means to kill ALL microbes - whether harmful or not - and their spores present on a surface or object. Autoclaves use steam heated to 250–273 °F. To achieve sterility, a holding time of at least 15 minutes at 250 °F or 3 minutes at 273 °F is required. Interested in reading more of the details? If so, just click [here](#) for the Lab Report as reported by **The American Journal of Infection Control** on Dry Vapor Steam with TANCS® Nano-Technology.

The research conducted by **The Department of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, MI**, demonstrates the ability of TANCS steam vapor to eradicate biofilm in a "3-second steam treatment" with 99.95 % killing efficiency. The study also noted that less **than one second** of applied **TANCS®** steam vapor equaled "10-ppm sodium hypochlorite (bleach) for 10-20 minutes of contact time."

Descending Order of Resistance to Germicidal Chemicals:

PRIONS, BACTERIAL SPORES, MYCOBACTERIA, NONLIPID OR SMALL VIRUSES, FUNGI, VEGETATIVE BACTERIA, LIPID OR MEDIUM-SIZE VIRUSES (where HIV, HBV and Ebola are Classified)

Chemical germicides used for decontamination:

Acids and alkalis, Aldehydes, Alcohols, Ammoniums, Chlorhexidines, Chlorine Dioxides, Hypochlorite's, Peroxygens, and Phenolic.

Please Note that all of the above Chemicals and Germs can cause severe health problems and/or lead to your Death within a moments time or some days later. For a better explanation or for a more detailed description of each, with fanciful words and even some that may be above a collegiate level, then click [here](#) and/or click [here](#).

CHEMICALS Can KILL...that Includes YOU! Depending on the Element (Vapor, Gas, etc.)/Mixture, Disinfection times takes 15 Minutes up to 5 hours for Sterilization. If one was to gamble and choose Chemicals over Vapor Steam, then these may be **YOUR Best Choice**: CIO2 (Tristel Duo Foamer), Alkalis Based, or Hydrochloric Acid.

Stay Safe. Be Smart. And As Always... **"Steam it Clean with Halls Vapor Steam!"**

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