



QUICK FACTS

iHP™ (Ionized Hydrogen Peroxide)



SURFACE UNIT: Handheld Portable



ENVIRONMENT UNIT: Complete Room Decontamination System

- TOMI™ SteraMist™ BIT™* is an innovative technology that converts Hydrogen Peroxide into a Hydroxyl Radical (Reactive Oxygen Species)
- BIT™ is a patented two-step process that activates a less than 8% Hydrogen Peroxide solution into a .04-3 micron sized particle acting like a gas
- TOMI's handheld portable Surface Unit is applied in 5 seconds per square foot with a 7 minute contact time
- Invented by DARPA in response to the 2001 Anthrax attacks
- No wipe, no rinse, non-corrosive and is a visible fog which disperses like a gas
- Easy to transport, can be customized and low maintenance costs
- Fast Application: Minimal down time and quicker than VHP
- Steramist consistently provides maximum efficacy from validated cycles as measured by a 6-log reduction (99.9999%), of viruses, bacteria, molds and spores.

**Binary Ionization Technology (BIT) is an EPA registered combination solution and application technology for use as a hospital-healthcare disinfectant (EPA registration # 90150-2). State registration pending.*

HYDROGEN PEROXIDE TECHNOLOGIES Competitive Analysis

				
	SteraMist™ BIT™ Ionized Hydrogen Peroxide (IHP) Innovative technology developed by DARPA that converts dilute Hydrogen Peroxide into a Reactive Oxygen Species (ROS)	Bioquell Hydrogen Peroxide Vapour (HPV) Concentrated Hydrogen Peroxide (35%) solution is vaporized under controlled humidity (dry, but >30% RH)	Sanosil HALO® Fogging Unit (aHP) Nebulizers to disperse Sanosil solution (dilute Hydrogen Peroxide and silver anions)	Steris (Vaprox) Vaporized Hydrogen Peroxide (Vaporized HP) Concentrated Hydrogen Peroxide 35% solution is vaporized under controlled humidity (dry, but >30% RH and less than 60% RH)
Chemical/Active Ingredients (SDS)	Hydrogen Peroxide - less than 8%	Hydrogen Peroxide - 35% H ₂ O	Hydrogen Peroxide - 5% Silver 0.01%	Hydrogen Peroxide - 35%
Application Time	<ul style="list-style-type: none"> SteraMist™ Surface - 5 sec SteraMist™ Environment - Approx. 8 min to reach a concentration of .5 ml per cubic foot to treat a 1200 ft³ space 	15 minutes	25 minutes	90 minutes
Contact Time	<ul style="list-style-type: none"> SteraMist™ Surface - 7 min SteraMist™ Environment - 15 min 	150 minutes 10 grams per minute 500 ft ² room	140 minutes to treat a 191.5ft ² or 75m ³ space	Minimum 90 minutes under optimized conditions
Aeration Time	<ul style="list-style-type: none"> SteraMist™ Surface - N/A SteraMist™ Environment - as low as 15 min dependent on room size, environmental conditions, and scrubbers (PortaSens used to check for concentration of < 1 ppm or lower) 	5 Hours	60 minutes + an additional 60 minutes after H ₂ O ₂ is below 1 ppm	6 hours 44 minutes
Kill Level (Based on EPA and Independent Tests)	> 99.9999%	>99.9999%	99.99% possible with longer treatment time	>99.9999%
RH Dependent	Low	High	Low	High
Temperature Dependency	Low	Moderate	Low	Moderate to High
Potential Damage to Equipment	None	High (Paint Blistering)	Moderate (Silver anion), Silver build up over time should have negative effects on delicate medical equipment	High (Paint Blistering)
Corrosion of Metals	Low	High	Moderate	High
By-Products	Evaporated Oxygen and Water	Evaporated Oxygen and Water	Silver Cations, Oxygen and Water	Evaporated Oxygen and Water