

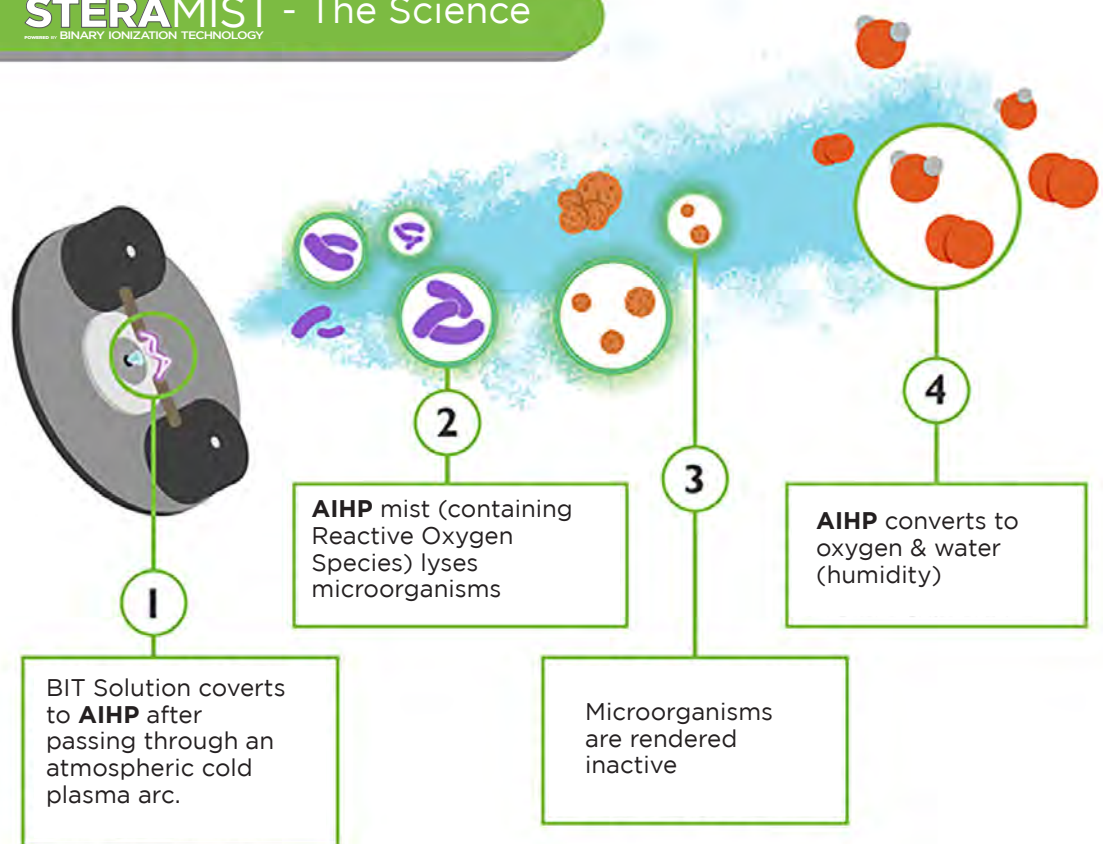
AIHP™

ACTIVATED IONIZED HYDROGEN PEROXIDE







STERAMIST - The Science

BINARY IONIZATION TECHNOLOGY



- Replace traditional formaldehyde, vaporized hydrogen peroxide, glutaraldehyde, & titanium dioxide as decontamination solutions.
- 5 second application, 7 minute contact, ideal for mishaps, spills, or quick material/equipment transfer.
- Complete room fogging system for single or multiple suite facilities.
- Easily incorporated into current cleaning procedures and protocols.

HYDROGEN PEROXIDE TECHNOLOGIES COMPETITIVE ANALYSIS

				
	SteraMist™ BIT™ Activated Ionized Hydrogen Peroxide (AIHP) 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 (VHP) 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	SteraMist™ Surface – 5 sec SteraMist™ Environment – Approx. 8 min to reach a concentration of .5 ml per cubic foot to treat a 1200 ft ³ space	15 minutes	25 minutes	90 minutes
CONTACT TIME	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	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
HMIS*/NFPA*				
HEALTH HAZARD	HMIS: 0	HMIS: 3	NFPA: 1	NFPA 704 Hazard Rating: 2
FLAMMABILITY	HMIS: 0	HMIS: 0	NFPA: 0	NFPA 704 Hazard Rating: 0
REACTIVITY	HMIS: 0	HMIS: 1	NFPA: 0	NFPA 704 Hazard Rating: 1
PPE*	SteraMist™ Surface - Bullard PAPR SteraMist™ Environment - HMIS: H	SCBA - in excess of IDLH 75 ppm	SCBA - in excess of IDLH 75 ppm	SCBA -in excess of IDLH 75 ppm