The Facts About Antimicrobials

Whenever an antimicrobial technology uses the words embedded, bound, contained, or mixed in a coating, it is very different than "chemically bonded". To say it is "bound" in a coating, adhered to or on a fiber, or embedded in a fiber does not mean it is chemically bonded. Understand the facts about mode of action and you will understand how the organosilane technology of the ÆGIS Microbe Shield® technology molecularly reacts with the substrate remaining intact as part of the treated article. It is the only technology that modifies the surface and remains durable to control the negative effects of bacteria, fungi, algae, and other microorganisms.

	ÆGIS Technology	SILVER BASED	TRICLOSAN BASED
Common Names/Variants	The ÆGIS Microbe Shield®	AgION Alphasan A.M.Y. X-Static and others	Biofresh Microban Sanitized Ultrafresh and others
Mode of Action	Ionically and physically destabilizes the cell wall membrane.	Releases ionic free radicals that react wth cell DNA and disrupt critical life processes in the cell.	Releases toxic bis-chlorinated phenol (PCB) for consumption or cellular absorption, disrupting critical life processes in the cell.
Leaching: Bleeds onto the user, into water, and into the environment.	Does not Leach. Does not Migrate.	Leaches for its mode of action. Must leach to work.	Leaches for its mode of action. Must leach to work.
Durability	Permanent.	Embedded in or on fiber binder, or coating.	Embedded in or on fiber binder, or coating.
Cost	Economical.	Generally high and fluctuates with the global economy.	Medium cost.
Effectiveness	Effective against a wide range of microorganisms from bacterial to fungal contamination like mold, mildew and algae.	Action variable based on concentration and test or use conditions.	Action variable based on concentration and test or use conditions.
Adaptive Organisms	Laboratory proven not to promote an environment for adaptative organisms (super bugs).	Adaptation possible Resistant species identified.	Adaptation possible Resistant species identified.
Applications	Any surface, fabric or substrate. Any style, any process.	Choices often limited to select fibers. Some not compatible with organic fabric. Interferes with common environmental chemicals.	Can be applied differentially to multiple fabric types depending on application procedure, coating used, or expected end use and abuse.
Distribution	World wide.	Varies by company.	Not accepted or available in certain areas of the world.

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Form 4G14 Rev. 06/2009

Complete technical data available upon request. Contact ÆGIS Corporate offices.