

Harmsco® SureSafe™ Prefilters

SureSafe™ Prefilters are an important breakthrough because they arrest the growth of mold and mildew before it contaminates water treatment equipment and are suitable for any existing installation without affecting the integrity of design.

Harmsco SureSafe™ Prefilters Utilize AgION™ Silver Zeolite Technology

Combining inert organic materials with silver into filter media enables our cartridges to reduce odour-causing bacteria and inhibit growth of destructive mold and mildew. SureSafe™ media is fabricated with the latest in Silver Zeolite technology. This greatly reduces the growth of bio-films on the filter element.

Benefits:

- Cost effective easy upgrade to any system i.e. use with an existing housing or add on for additional protection.
- Available in a wide range of sizes, from 10” slimline to big blue to Hurricane® & WaterBetter® housings.
- Safe, EPA Registration No. 71227-1-72854EPA Establishment No. 72854-MA-001.
- Cleanable and Reusable, available in 5, 20 and 50-micron ratings.
- Effective against more than 650 strains of bacteria, fungi and molds in laboratory environments.

Code	Micron*	No./Case	Ship Wt. (lbs.)
10” Calypso Blue Cartridges (4 ½” OD x 9-3/4” L)			
HB-10-20W-AM	20	8	8
HB-10-50W-AM	50	8	8
20” Calypso Blue Cartridges (4 ½” OD x 20” L)			
HB-20-20W-AM	20	4	6
HB-20-50W-AM	50	4	6
Harmsco® Hurricane® and WaterBetter® Cartridges			
HC/40-20-AM	20	1	4
HC/40-50-AM	50	1	4
HC/90-20-AM	20	1	7
HC/90-50-AM	50	1	7
HC/170-20-AM	20	1	10
HC/170-50-AM	50	1	10
Harmsco® Filter Cartridges (2 ¾” OD x 9 ¾” L)			
801-20-AM	20	24	11
801-50-AM	50	24	11

* Other micron rating available – Please contact us for details.



Scientific Background

Core Technology

AglON™ antimicrobials are based on an ion exchange technology that is not only safe, effective and durable, but also provides an alternative to a vast array of synthetic organic chemicals. What makes our product unique is the delivery system. The multi-faceted Zeolite crystal carrier provides a three dimensional release mechanism (Figure 1) that provides efficient release of silver ions independent of particle orientation in the substrate.

Activation

Silver is a powerful antimicrobial metal ion. Figure 2 shows the ion exchange process. Zeolite crystals containing silver ions are randomly oriented and distributed through the surface of a polymer or coating. In conditions that support bacterial growth, the sodium ions, in ambient moisture, exchange with silver ions at reversible bonding sites on the Zeolite. The exchanged silver ions are now available to control microbial growth.

Method of Control

AglON™ antimicrobial attacks multiple targets in the microbe to prevent it from growing to a destructive population. The silver ions interfere with cell growth in three ways. They inhibit transport functions in the cell wall, they inhibit cell division, and they interrupt cell metabolism. This tri-modal efficacy is unique to inorganic metal ion antimicrobials and reduces the possibility of developing resistant bacteria.

Broad Spectrum Control

AglON™ antimicrobials are effective against gram positive and gram negative bacteria as well as a wide array of fungal organisms. Figure 3 shows the effectiveness of AglON™ in controlling fungus. After ten days, the untreated sample is overgrown while the treated sample has no growth.

Media Specifications

Micron Rating: Antimicrobial Polyester-Plus in 20 and 50 micron
Filter Media: Antimicrobial media with Silver Zeolite fibres
Center Tubes: ABS or PVC
End Caps: Pliable PVC with sealing surface built-in
Temperature: 140°F/60°C temperature limit
Shrink Wrap: Standard for all Antimicrobial cartridges

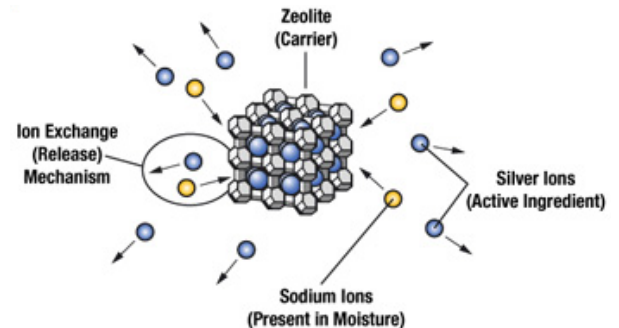


Figure 1

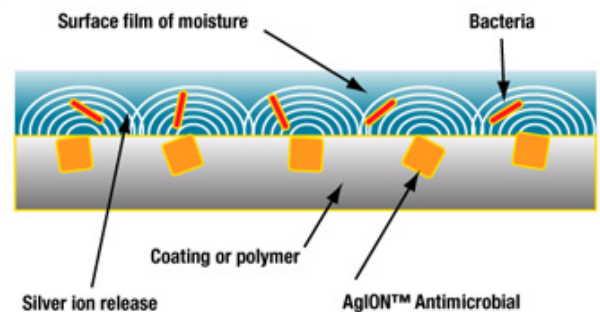


Figure 2

10 Day Fungal Tests

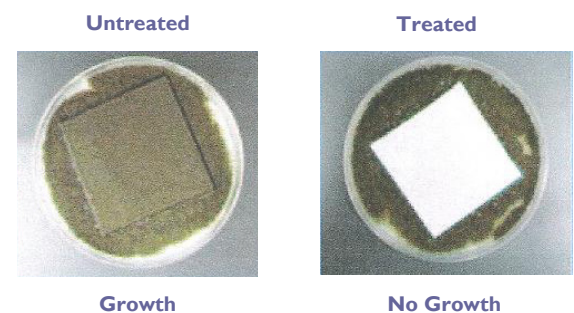


Figure 3