RepelaCOAT™

ANTI-MICROBIAL COATING

RepelaCOAT™ coatings are

EFFECTIVE:

RepelaCOAT prevents growth of commonly occurring organisms such as *E.coli*, *S.aureus*, and *P.aeruginosa*.

SAFE:

RepelaCOAT maintains a slow release profile that minimizes toxicity to surrounding tissue.

LONG LASTING:

RepelaCOAT has demonstrated effectiveness for up to 30 days.

AQUEOUS:

RepelaCOAT coatings, since they are based on the LubriLAST™ platform, contain no organic solvents. Safer and cleaner manufacturing processes are used and any concerns about residual solvents in a device are eliminated.

DURABLE:

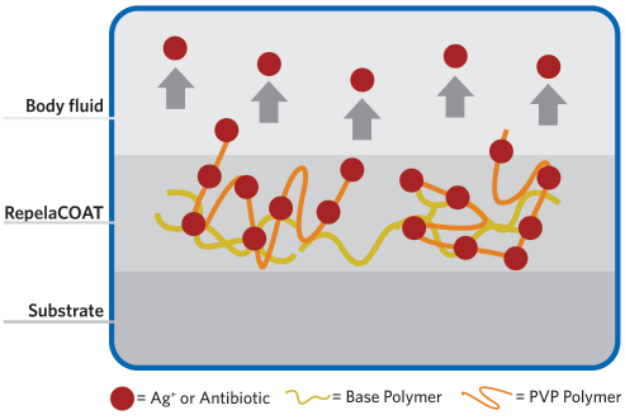
RepelaCOAT retains its physical integrity even after hundreds of cycles.

LUBRICIOUS:

RepelaCOAT incorporates lubricious polymers that reduce patient trauma and increase ease of handling.

How does RepelaCOAT™ work?

In RepelaCOAT™, silver salts and/or antibiotics are ionically bonded to the supporting polymer. In the presence of the sodium or calcium ions characteristic of body fluids, the antimicrobial agents ion exchange with these physiological cations. Long chain hydrophilic polymers incorporated in the coating adsorb water molecules and facilitate the ion exchange. Rather than exhibiting a huge "spike" of activity that diminishes rapidly over time — and that may be toxic to the surrounding tissues — RepelaCOAT prevents bacterial adherence by its slow ion-exchange release of anti-microbial agents.



PARTNERSHIP APPROACH

AST partners with its customers from beginning to end. Our customers have complete access to AST's considerable technical expertise throughout the device design and development process. By working with customers every step of the way, small design changes can be made early in the process that prevent huge delays and overruns late in the game. Along with the coating chemistries, a customized, easy-to-use process is developed under strict ~~ISO 9001:2008 and~~ ISO 13485 design control. Our partnership support does not end with the finalization of coating formulation or product design. We work with the customers to ensure smooth and trouble-free implementation at their or at AST's facilities. To accelerate the approval of new devices, AST's experienced staff continues to provide assistance throughout the regulatory approval process and product introduction.

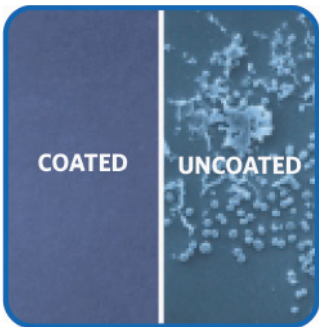
AST PRODUCTS, INC.

RepelaCOAT™

ANTI-MICROBIAL COATING

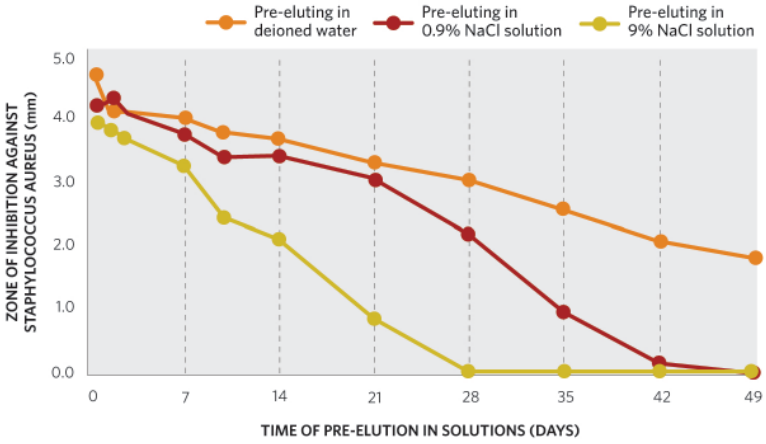
Anti-Microbial Coating

RepelaCOAT is an infection-resistant medical device coating with a patent pending, ion-exchange release mechanism. Unlike most anti-microbial coatings that have only a brief, initial spike of activity, RepelaCOAT can be customized to have a controlled, initial "peak release" followed by a sustained release of anti-microbial agents in the presence of blood or urine.

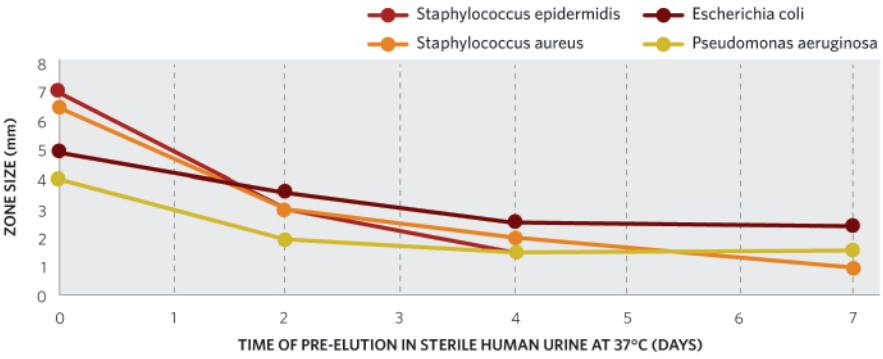


Anti-Microbial Profile — Silver Salt

ION EXCHANGE MECHANISM



Anti-Microbial Profile — Antibiotic



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