SciCron Technologies

Technical Bulletin AMC-01
AMC-800™ Anti-Microbial Clear Coating

Description
AMC-800™ is a primer free, permanent high gloss clear hard coat system with excellent anti-microbial properties applied in-house to plastic substrates. Our scientifically proven anti-microbial technology will provide lasting and effective protection against harmful bacteria, mold, fungi, by up to 99.9%. The anti-microbial component kills microbes upon contact thereby reducing transmission of pathogens from the coated surface. AMC-800 is an easy to clean, hydrophobic, non-leaching, abrasion resistant coating with excellent antimicrobial properties.

SciCron's antibacterial technology will offer lasting protection from bacteria, including superbugs such as MRSA and E. Coli. It is perfect for use in hygiene conscious environments where cleanability, scratch resistance, and the transfer of microbes is a concern. AMC-800™ Anti-Microbial clear coating is infused with permanent antimicrobial that will not leech, cause discoloration, or affect the final product.

AMC-800™ should be used in in addition to standard disinfectant practices.

Applications
AMC-800™ Anti-Microbial clear coated plastics can be used wherever hard coated plastic is required and antimicrobial treatment is needed. The application is a low temperature process, producing a tough crosslinked scratch resistant matrix. Ideal applications include touch screens, hospital/medical displays and surfaces, and other transparent plastic surfaces where pathogen transmission is an issue. AMC-800 can be heat bent in smooth curves and line bent 90 degrees without cracking or hazing. Testing has shown, limited elongation of the coating is not an issue. Tight inside curves that compress the coatings can haze due to the fact that the coating is crosslinked and cannot compress upon itself. Deep drawn vacuum thermoforming is not suitable for this coating. Deep drawn and machined parts can be custom coated after processing.

Properties
Coating Adhesion (ASTM D3359) - No coating removal in standard crosshatch tape pull adhesion testing.
Gloss (ASTM D523) - 140 ± 5
Haze - 0.5 ± 0.5 1/8" PC substrate
Good Hardness & Abrasion Resistance - 2lb. weight, 1/2" contact area, 0000 steel wool - 25 double rubs, no loss of clarity
Transmittance (ASTM D1003) - 90± 5, 1/8" PC substrate
Bacterial Reduction (ISO 22196) - S. aureus +99%, E. Coli +99%

Cleaning Instructions
The AMC-800™ Anti-Microbial clear coating is hydrophobic, soil and scratch resistant with antimicrobial properties. If the surface has been subjected to contaminating conditions, observe the following cleaning instructions to maintain the function and integrity of the coating:

Clean with water, disinfectants, mild glass cleaners, or a solution of mild dishwashing soap and water, rinse with water after cleaning. Dry with a clean, soft microfiber cloth - **Do not** rub dry with coarse paper towels or soiled towels as this can scratch the surface and eventually wear off the coating. Do not use cleaning agents containing an abrasive.

Product Availability
AMC-800™ coating can be applied to many clear & tinted plastics including acrylics, polycarbonate, PETG, PET, PVC. It can be applied on one or both sides or it can be combined with SciCron Technologies' C-300™ ESD coating or Mar-Con® 550 Hard Coat for a two-side Dual-Coat™ product. **AMC-800™ Anti-Microbial clear coating can also be custom coated to customer supplied sheets, parts, and assemblies.**

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