



AMF™ SERIES ANTIMICROBIAL FILMS

Dontech's antimicrobial coatings minimize the growth and impact of bacteria and are specifically designed for touch screens, membrane switches, and optical overlays used in medical and high-touch, public environments. AMF™ Series films contain embedded silver nanoparticles that inhibit microbial growth (99% reduction per ISO 22196 test methods). The high optical transparency and durability of the AMF films make them ideal for protecting electronic displays and overlays used in medical, food processing, ATM, POS and kiosk applications.

The silver-based antimicrobial coating is incorporated into an antiglare surface hard coating and is mechanically, chemically and thermally stable. The antimicrobial coating can be incorporated into Dontech products including optical EMI/RFI and contrast enhancement filters, touch screens, and display assemblies. In addition, the coating can be offered in sheet or roll form, with or without protective masking and/or pressure sensitive adhesive (PSA).

Dontech's AMF Series films are non-hazardous and cleanable, and they provide the following performance enhancements:

- Interrupt bacterial enzymes
- Inhibits growth of common, harmful bacteria such as E. coli
- Antiglare, hard coated surface
- Good optical transmission and mechanical durability
- Sold in rolls, sheets, cut-to-size
- Can be applied to touch screens, displays, and electronic display optical filters

Testing Results:

Moderate abrasion test (cheesecloth per MIL-C-675C, 4.5.11)	Pass
Adhesion (cellophane tape, MIL-C-675C, 4.5.10)	Pass
Adhesion (crosshatch, ASTM D3359)	Pass 5B
Gloss (BYK Gardner Micro-TRI-gloss meter per ASTM D2457-03)	50 @ 60 deg.
Total Luminous Transmittance (BYK Gardner Haze-Gard Plus per ASTM D1003)	91%

Chemical Resistance:

Chemical Resistance	1 Hour Surface Contact at 23°C	4 Hours Surface Contact at 23°C
Acetone	Pass	Pass
Concentrated HCl	Pass	Fail
MEK	Pass	Pass
Toluene	Pass	Pass
Methylene Chloride	Pass	Pass
Isopropyl Alcohol	Pass	Pass
Cyclohexanone	Pass	Pass
Ethyl Acetate	Pass	Pass
Xylene	Pass	Pass
Brake Fluid	Pass	Pass
Butyl Cellosolve	Pass	Pass
Hexane	Pass	Pass

Per manufacturer specifications and testing, a 99% rate of inhibiting bacterial growth, specifically Escherichia coli, Klebsiella pneumoniae, Enterococcus faecalis, Salmonella enterica and Listeria monocytogenes.

Material	Available Thickness	Substrate	Format
AMF	0.005" (127 micron) with adhesive	PET	sheets, rolls, optical filter, touch screens; max. roll width 60"





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Company Profile:

Dontech is an AS9100D and ISO-9001:2015 designer and manufacturer of optical filters, laminations and thin film coatings for the precision optics, display and touch screen markets. Since 1971, we have designed and manufactured custom components that enhance the performance of optical systems from concept to final system delivery.

At Dontech we have extensive engineering and technical support resources. Our technical staff have diverse backgrounds relevant to high performance display and precision optics markets. For many of our top customers, we function as an extension of their engineering departments through the design and integration of optical components to enhance their display and touch screen systems. Call us today at 215-348-5010 or email us at sales@dontech.com to speaking with one of our sales engineers.

Release Statement:

The antimicrobial performance testing data is provided for reference purposes only. Dontech makes no direct or implied claims that this product will protect users or provide other health benefits. Finished products that incorporate Dontech AMF films may not make any public health claims without proper regulatory testing and approvals. This product is not approved for use with products involving food contact, food packaging, or storage of human drinking water. The application suggestions, specifications and other performance data described here are based on lab testing and market experience which are believed to be reliable nominal performance values. In all cases customers must approve the form, fit and function of the product production environment in order to determine the suitability of the product for the intended application.