

TECHPLAST INFOwww.TechPlast.com**TechPlast Coated Products Llc**
P.O. Box 479 · Baldwin, NY 11510T. (516) 223-7500 · F: (516) 868-2371
E: info@techplast.com**HOW TO HANDLE TechPlast® AR COATED FILTERS**

TechPlast® AR Coated Filters have a coating consisting of multiple layers with different thicknesses and refractive indices. The coating reduces reflection on the coated surface, and increases the light transmission significantly.

The AR coating is, by necessity, extremely thin (measured in microns). Due to this the AR coating is somewhat delicate, and proper precaution and care must be taken to prevent damaging the coating. Therefore we wish to offer this advice regarding the proper handling and care of TechPlast® AR Coated Filters.

A Caution for Scratches: TechPlast® AR coated filters have a scratch resistant coating on the AR coated side. The Hard Coat has a harder surface than the underlying acrylic (Hardcoat has a pencil hardness of 6H minimum). This coating will resist scratching due to its hardness, but since the coating is so thin it will NOT resist abrasion damage caused by repeated rubbing or other abrasion. Scratching or rubbing with gritty or hard materials will scratch the surface, and repeated abrasion of the surface will eventually abrade through the coating and damage the surface. Never rub the surface with a dirty cloth or anything hard or abrasive.

A Caution for Smudges: TechPlast® AR coated filters have very low reflection (less than 0.5% at 550nm vs. non-AR coated Acrylic Filter - about 8% at 550nm), and very high light transmission (AR Coated filter : > 98%, non-coated acrylic filter : about 92%). Smudges and fingerprints are much more visible on AR coated surfaces than on uncoated surfaces. For this reason, unless otherwise specified, the outside surface of our AR coated filters (outside is masked with clear masking film, inside is masked with colored film) is treated with a proprietary Anti-Smudge Coating, which aids in cleaning smudges and fingerprints using a clean, dry, soft cloth. Even with the anti-smudge coating, perspiration and oils are difficult to clean. Therefore, when touching the surface, fingers should be clean and dry. The best way to avoid fingerprints and smudges is to avoid touching the surface altogether.

* **A Caution for Assembly:** The back surface of AR coated sheet does not have Anti-Smudge Coating. Never touch the bottom surface. It is difficult or impossible to clean. Of course, one must avoid touching the top surface. All TechPlast cast acrylic sheet products are shipped from the factory with protective film masking, to protect the underlying sheet from scratches, fingerprints, and smudges during shipping and fabrication. This masking must be removed prior to installing the finished filter.

A Caution regarding Chemicals: The AR coated surface may be attacked by certain chemicals. There should be no contact between the AR coated surface and acids and alkalis. While contact with pure water and salty water is generally not a problem, avoid all contact with water and sea water, because these generally contain dissolved minerals and chemical substances which might damage the AR coating. Never use water, or even a wet cloth, to clean the surface.

How to Clean: Using light pressure, wipe the surface of the TechPlast® AR coat filter with a clean, dry, soft cloth. In general, cloths and paper cloths used for cleaning AR coated reading glasses should be OK for our AR coated filters. If the filter has heavy smudges from sweat or oils which are difficult to clean with a dry cloth, we recommend cleaning solutions for eye glasses which have high volatility.

Special Note for Installing TechPlast® AR Coated Filters:

When filters are ordered with anti-smudge coating on one side, the anti-smudge coated side is masked with clear PE masking film. We call this the "outside", which is the side that will be exposed and subject to fingerprints, smudges, etc. The side which is NOT anti-smudge coated (the "inside") normally is protected with green tinted PE masking film. When installing the filter, make sure the "outside" clear-masked side, is facing out.