

AR TopClean Coating

The Challenge

Our new AR TopClean Coating is the ideal protection for touch-screen applications and optics devices. It prevents adhesion of dust, oil and grease and facilitates removing fingerprints and stains from the filter surface. Combined with our AR (anti-reflection) multilayer coating, it enables filters to perform at high transmission even in harsh environments. The very hard coating also increases filter lifetime by protecting it against wear and scratches from sharp objects.

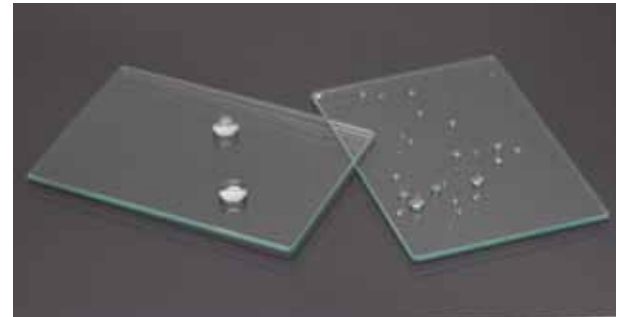
AR TopClean Coating consists of a multilayered anti-reflection coatings covered by a single hydrophobic/oleophobic layer. It can be applied to most common optical glasses and plastics. The coating does not influence transmission properties in the UV, VIS and IR spectrum and can be combined with different kinds of thin film coatings.

Benefits

- Contact angle larger than 113°
- High transmittance
- Completely transparent in UV, VIS and IR
- Scratch and corrosion resistant
- Easy to clean

Applications

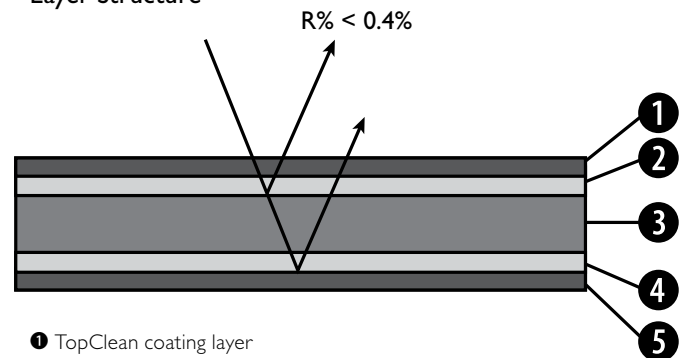
- Mobile Phones / Smart Phones
- Portable Multimedia Players
- Portable Gaming Devices
- Digital Still Cameras
- Medical Displays
- Avionics Displays
- GPS Displays
- Camcorders
- E-Book Readers
- Other Optical Devices



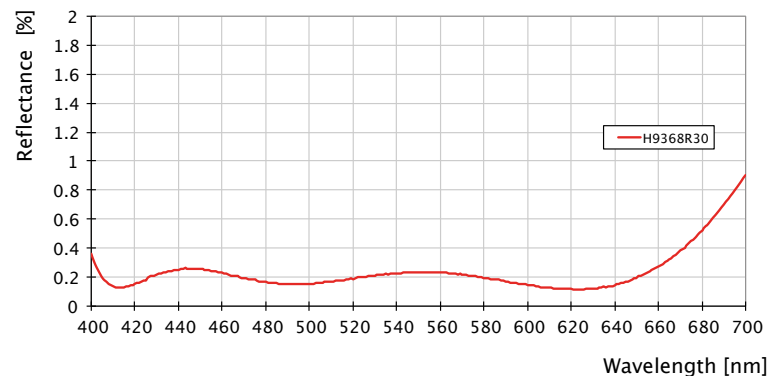
Specifications

- Contact angle: >113°
- Reflectance: <0.4% @ 420~680nm
- Coating hardness: As per ISO15184: H5
- Surface quality: 60/40 (standard) or 20/3 (low defect)
- Size: Up to 8 inch wafer size
- Substrate material: Upon request

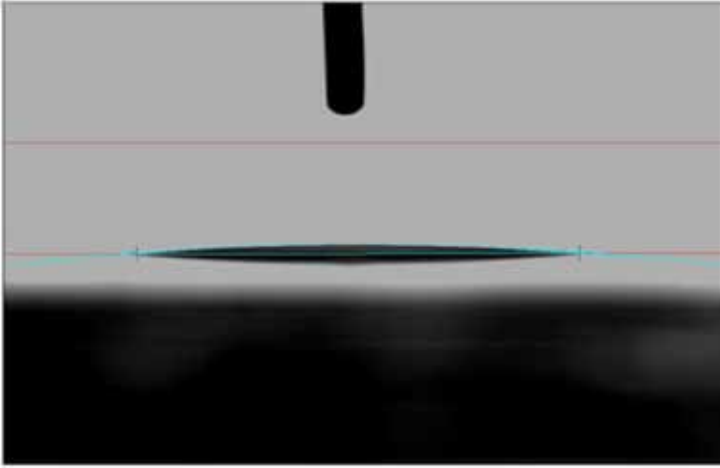
Layer Structure



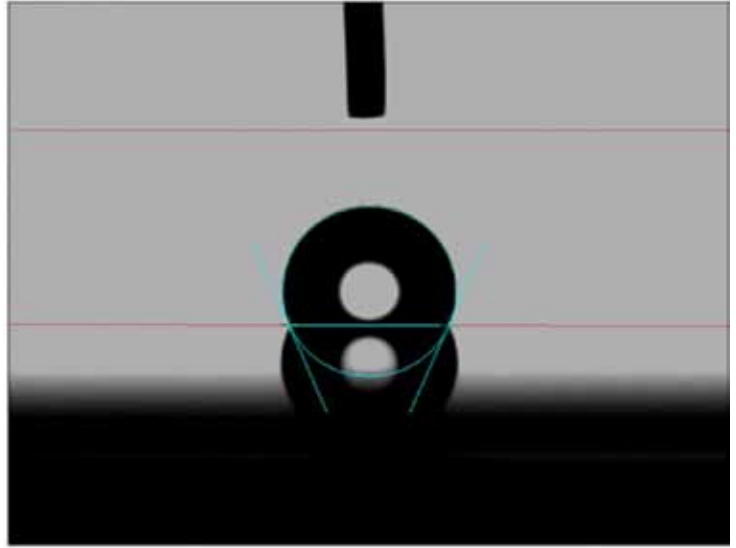
- 1 TopClean coating layer
- 2 Anti-reflection coating layer
- 3 Glass substrate
- 4 Optional layer (AR / ITO)
- 5 Optional layer (TopClean coating layer)



Raw glass
Contact angle = 5~6°



With AR TopClean Coating
Contact angle >113°



Materion is a global advanced materials company, dedicated to providing solutions that enable our customers' technologies and drive their growth. Our products include precious and non-precious specialty metals, precision optical filters, inorganic chemicals and powders, specialty coatings, specialty-engineered beryllium alloys, beryllium and beryllium composites, and engineered clad and plated metal systems. The Materion business is structured to enhance our ability to provide customers with innovative, best total-cost solutions.

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