Coatings Corner

Oleophobic vs. Hydrophobic Coatings

Oleophobic vs. Hydrophobic Coatings Oleophobic (anti-smudge) coatings on glass and ceramic surfaces create an oil resistant, anti-fingerprint surface that is impervious to dirt, dust, oils, and other particulates resulting in a surface that is easy-to-clean and maintains a cleaner surface longer than untreated glass. Oleophobic coatings are well-suited for projected capacitive (PCAP) and capacitive touch screens, handheld devices, teleprompters, virtual reality applications, and more.

Hydrophobic coatings do not allow water to bond with the surface of the glass. The coated surfaces of the glass become water-resistant, repelling water, dust, oil, dirt and a host of aqueous solutions allowing for easy cleaning of the substrate. Abrisa Technologies’ water repellant hydrophobic coating is an organic film that does not degrade or delaminate over time. The coating can be applied for optics applications with wavelengths between 250nm and 2,700 nm. The rugged coatings comply with MIL-C-575C for severe abrasion. The hydrophobic coating can be provided in either a coated or laminated process and is ideal for touch screen applications.

Abrisa Technologies can provide Oleophobic and Hydrophobic coatings on glass substrates from 01.mm to 25mm thick.

The coatings can be applied in conjunction with other Abrisa Technologies coating and fabrication processes for highly customized optics solutions.

CleanVue™ PRO when bonded to Abrisa Technologies’ proprietary AR coating has proven to be rugged and durable, and has a low coefficient of friction, providing protection against scratching. Abrisa Technologies’ extensive tests concluded that the product’s oleophobic and hydrophobic water-repelling characteristics did not breakdown or degrade after steel wool, cheese cloth, and MIL-C-675C severe abrasion eraser testing. The coating can also be applied to glass substrates and select coatings for enhancement to their hydro/oleophobic properties.

Click below for more information:

CleanVue™ PRO – PRO-AR399
Abrisa Technologies, a member of HEF Photonics, is a globally recognized technology glass fabrication and optical thin film coating company with expertise in high volume manufacturing and engineering capabilities, delivering Total Solutions that provide excellent performance, fitness-for-use and economies of scale.

Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.