



Enabling functional integration in mobility and beyond.

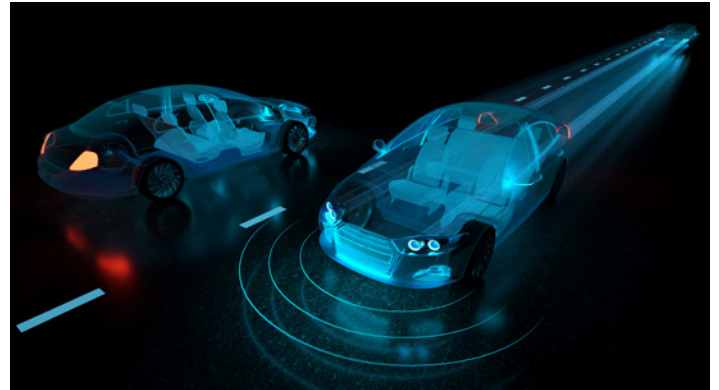
Black, near infrared transparent polycarbonate film for sensor applications.

Makrofol® ST



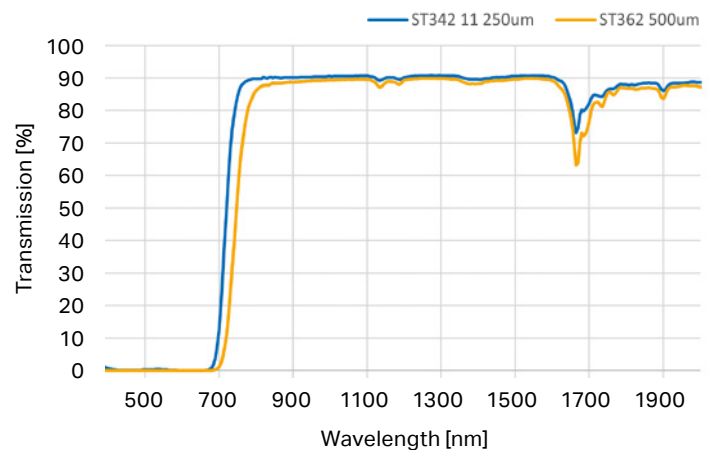
Functional integration with Makrofol® ST

Mobility is changing very rapidly, and tomorrow's driving experience will be different from what it is today. With our **Makrofol® ST342** and **Makrofol® ST362** near infrared (NIR) transparent film, we support the development of embedded sensors, which are essential for autonomous and assisted driving technologies. In particular, with **Makrofol® ST342** and **Makrofol® ST362**, we address the need for a tinted film in LiDAR (Light detection and ranging) applications, such as front modules for electric vehicles.



Components and benefits of Makrofol® ST342 1-1 and Makrofol® ST362 1-1:

- High optical quality film based on polycarbonate with a deep black visual appearance
- High light transmission in the NIR range
- Well-defined low-light transmission in visible range (VIS)
- Smooth and glossy surface (1-1) on both sides, lined with protective masking
- The material excels in further processes like cutting, high pressure or thermoforming, film insert molding (FIM), printing and coating, enabling excellent product customization.



Makrofol® ST342 and **Makrofol® ST362** can also be applied beyond mobility applications, including consumer electronics and appliances, embedded sensors, as well as smart home devices.

Typical parameters

Grade	Film thickness	Transmission (VIS)	Transmission (NIR) at 905 nm	Gloss	Masking
ST342 940002	250 µm	≤ 1 %	≥ 89 %	≥ 99 %	Polyolefine both sides
ST362 940006/ 940007	375/500 µm	≤ 0.2 %	≥ 87 %	≥ 99 %	Polyolefine both sides

Key Features

Transmissive in near-infrared

Black film

UV protected

High formability



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