



MOCOM

Alcom® LIR Light InfraRed Invisible Light Performer

Alcom® LIR features optimized materials for infrared (IR) light applications with high transmission in the near-IR spectrum and particularly low transmission in the visible light spectrum. Thereby sensors and cameras can be hidden safely and fully functioning behind piano black lenses.

While hindering the transmission of visible light (wavelength 380 – 780 nm), Alcom® LIR enables full transparency and lowest haze in the infrared spectrum (from 780 nm). The visual experience is characterized by a deep and glossy black appearance. At the same time, IR optical elements hidden behind a cover of Alcom® LIR remain fully functioning and safely protected against environmental impacts, such as visible stray light, dust, dirt or mechanical stresses.

MOCOM offers three different alternatives, which differ primarily in the wavelength at which full transmission is achieved (wavelength 780 – 900 nm).

Even based on recycled raw materials, Alcom® LIR ECO still meets lighting requirements, though with slightly increased opacity.

Advanced processing technology and comprehensive know-how in formulation and production technology of lighting products enable

Alcom® LIR to be provided in consistently high quality and with specified visible light and IR-optical properties. This package has been convincing our customers for years, e.g. in the application areas of automotive driver assistance systems, for safety and surveillance cameras and in consumer electronics. Typical applications include proximity sensors, IR camera lenses, protective screens for IR-LEDs and bezels for gesture control systems.

Additional products and information are available on request.

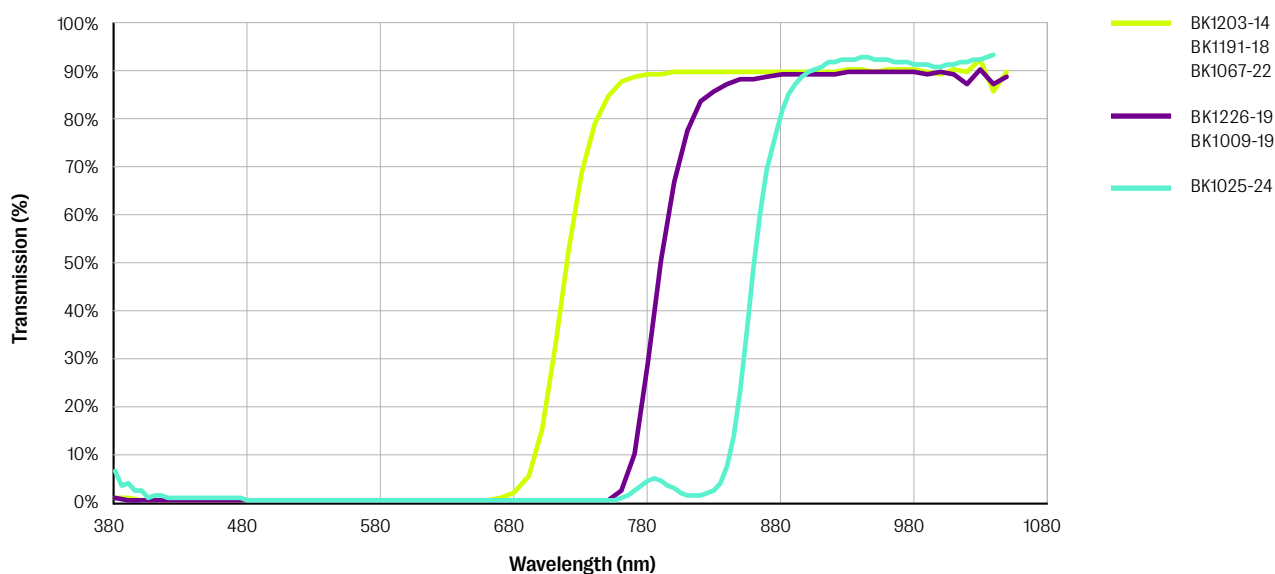
Alcom® LIR: the advantages at a glance

- Compounds based on Polycarbonate (PC), other transparent polymers possible
- Highest transmission and lowest haze in near-infrared spectrum
- Piano black appearance, blocking of visible light

Polymer	Material name	UV stabilized	Start max. transmission level at wavelength	Spectral transmission at 800 nm*	Spectral transmission at 900 nm*	Haze*
PC	Alcom® LIR ECO PC 1000 BK1067-22	No	780 nm	>90%	–	≤ 20%
	Alcom® LIR PC 1000 18155 BK1191-18	No	780 nm	>90%	–	≤ 3%
	Alcom® LIR PC 1000 UV 14099 BK1203-14	Yes	780 nm	>90%	–	≤ 3%
	Alcom® LIR PC 1000 19005 BK1009-19	No	850 nm	–	>90%	≤ 3%
	Alcom® LIR PC 1000 UV BK1226-19	Yes	850 nm	–	>90%	≤ 3%
	Alcom® LIR PC 1000 BK1025-24	No	900 nm	–	>90%	≤ 3%

* measured at 1 mm wall thickness

Transmission Spectrum



Areas of Application



Surveillance electronics



Gesture control



Automotive assistance systems

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