

Electrically conductive, transparent coatings

HIGHLY EFFECTIVE CONDUCTIVE COATING TECHNOLOGY

HeiQ ECOS® is a transparent electrically conductive and infrared reflective coating. Its silver wires technology combines the excellent electrical properties of silver and the advantages of very thin fibers.



Outstanding qualities

- Highly transparent (up to 98% light transmission)
- · Resource-saving
- · Energy-efficient
- All-over coating
- Electrically conductive
- Low-E
- High reflection of IR and Radar frequencies

Added value

- All HeiQ ECOS® surfaces can be additionally equipped with durable antimicrobial protection
- Surface resistance can be adapted
- Usable on flexible and rigid substrates

WHAT DOES IT DO?

Using HeiQ ECOS® silver wire technology ensures surface functionalization with a minimum of material. HeiQ ECOS® formulations form an invisible electrically conductive network with resistances possible from a few Ohm up to several Mega-Ohm per square.

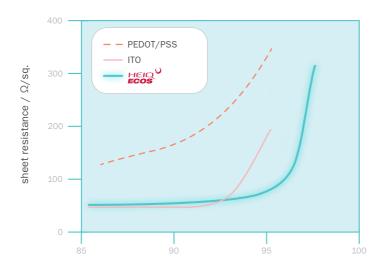
WHAT IS IT FOR?

HeiQ ECOS®'s applications range from transparent heating layers to invisible wiring, conductive coatings, printed electronics, or anti-static discharge protection of electronic components. HeiQ ECOS® can be used to create highly conductive surfaces, fibers and textiles, as well as radar and IR camouflaging (IR shielding/IR reflection).

MULTIFACETED COATING TECHNOLOGY

Coatings based on HeiQ ECOS® silver wires are suitable for a variety of substrates: rigid and flexible, glass and plastics as well as plane and curved substrates. It can be diluted in any ratio with water and short-chain alcohols such as ethanol or 2-propanol. The dispersion is suitable to produce electrically conductive coatings and paints. The coating formulation is easy to process and flexible.

PERFORMING TO THE HIGHEST STANDARDS



transmission without substrate / %

Compared to conductive polymers such as PEDOT/PSS, HeiQ ECOS® silver wires can demonstrate significantly better conductivity with simultaneously higher optical transmission / transparency in the visible range (400 - 800 nm).

The silver wires demonstrate its strengths for applications where 50 - 100 Ohm/sq are required. Compared to other materials (ITO) with comparable resistance values, higher transmission values can be achieved with HeiQ ECOS® .



Get inspired and learn more about our innovative technologies info@heiq.com

HeiQ Materials AG

Ruetistrasse 12, 8952 Schlieren (Zurich) Switzerland info@heig.com, +41 56 250 68 50

www.heig.com/polymers-coatings

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