



Materials | Development | Solutions

## Clevios™ S Screen Printing Pastes

### Innovative solutions!

Clevios™ S pastes are PEDOT/PSS based formulations for screen-printing. They are used to print electrodes, especially transparent conductive electrodes that are used in many devices and novel technically advanced applications.

Product	Description	Typical SR** [Ohm/sq]
Clevios™ S V3	standard conductive paste	350 – 500
Clevios™ S V3 STAB*	S V3 type with improved environmental performance	450 – 600
Clevios™ S V4	high conductive paste	200 – 350
Clevios™ S V4 STAB*	S V4 type with improved environmental performance	250 – 500

\* S V3.1 and S V4.1 equivalent products for U.S. market – all components listed on TSCA inventory  
\*\* typical surface resistivity measured on prints made with standard 140/31 screen

Application quantity: approx. 12 g of wet film/m<sup>2</sup>  
Processing guide available on request.

#### Advantages:

- Can be thermoformed into three dimensional shapes
- Flexible
- Transparent
- Highly conductive
- Screens can easily be cleaned by water

#### Transparent Electrode Applications:

- EL lamps
- Touch-sensor and -switches
- Electrochromic devices
- Piezoelectric devices
- Printed Electronics

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Clevios™ S pastes are easy to handle. Conventional hot air ovens can be used for drying. If sensitive substrates are used or if rapid drying for high production throughput is needed, the Heraeus Noblelight experts offer customized IR (infrared) emitters that allow gentle drying of Clevios within just a few seconds.

Screens can be conveniently washed and cleaned by water after printing.

Printed Clevios electrodes and patterns show high transparency and low surface resistivities. The Clevios layers are highly flexible and the coated substrates can be 3D-shaped by thermoforming, for example.

“STAB” types are available that show excellent stability under harsh environmental conditions, such as dry or damp heat, e.g. 85°C/85% rh.

### Touch Slider

“3D-Touch Slider” won the oe-a “best prototype and new product” award at LOPEC 2015. The slider is based on Clevios™ PEDOT:PSS screen-printing pastes, and was realized in cooperation with Elmeric GmbH and FM siebdruck GmbH.



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# Clevios™