Printed Electronics

A member of ALTANA

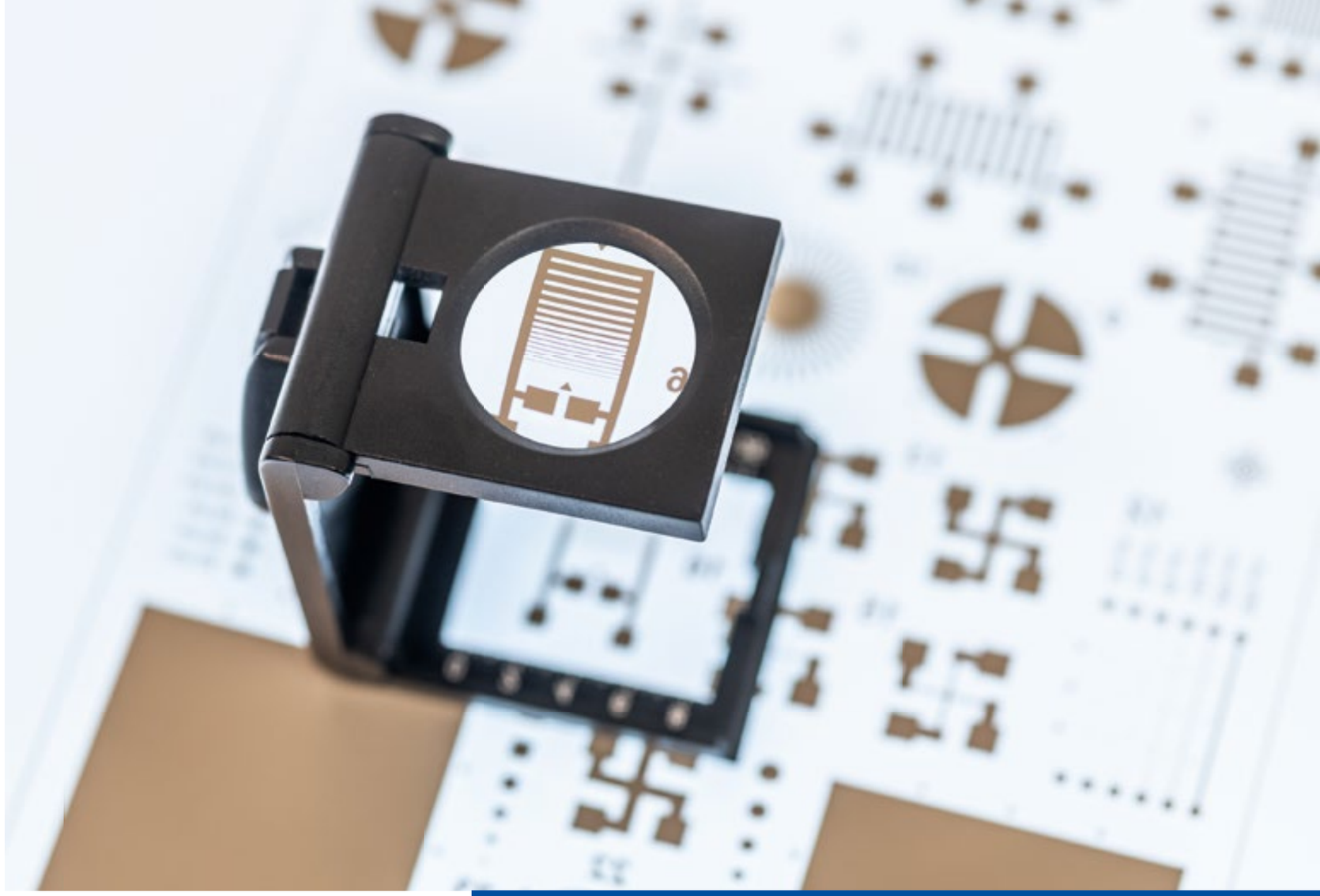
ELANTAS

ELANTAS

Functional inks
and more

Excellent inks and personal support for printed electronics offers you our Product Line Printed Electronics, to push forward your applications.

Our portfolio includes conductive, insulating and functional screen printing inks for applications such as membrane switches, touch surfaces, in-mold-electronics, hybrid electronics, sensors, RFID antennas and electroluminescent lighting.



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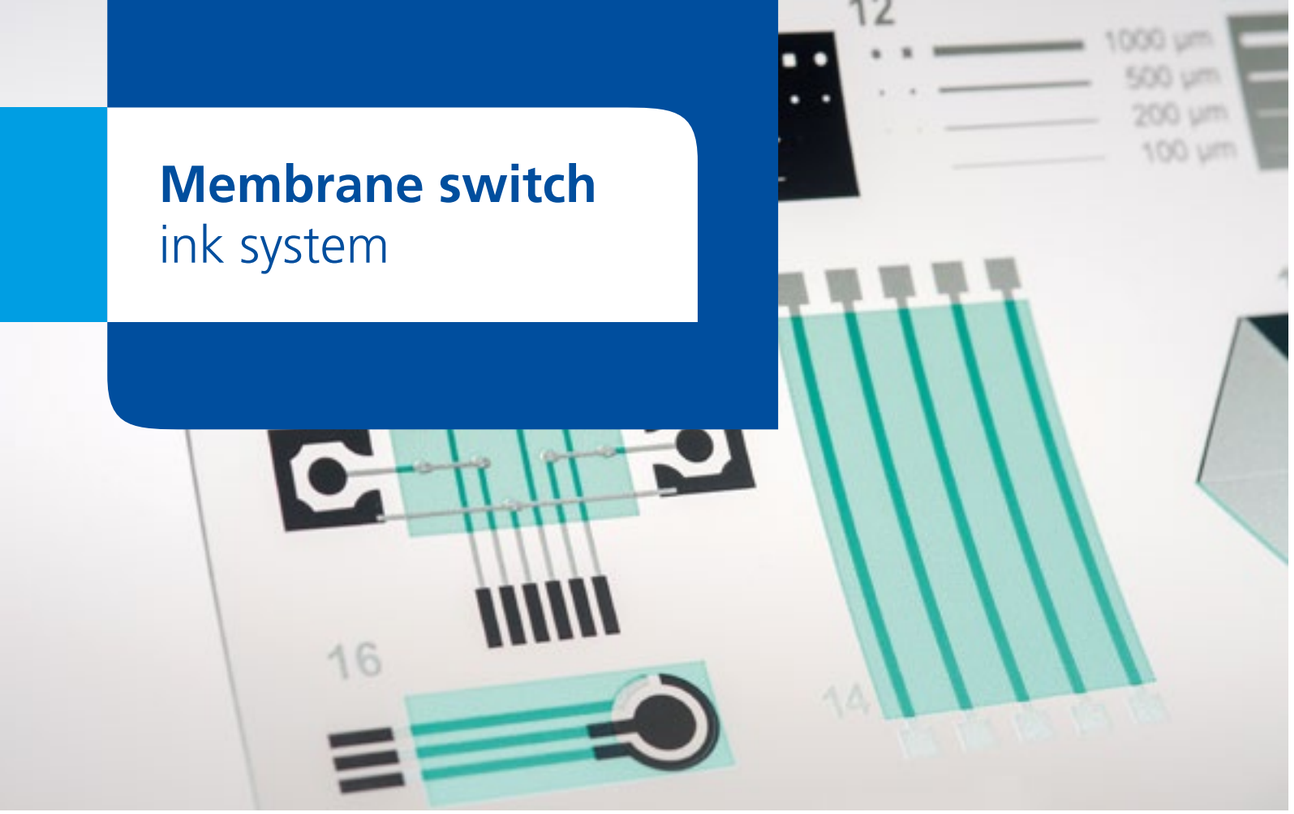
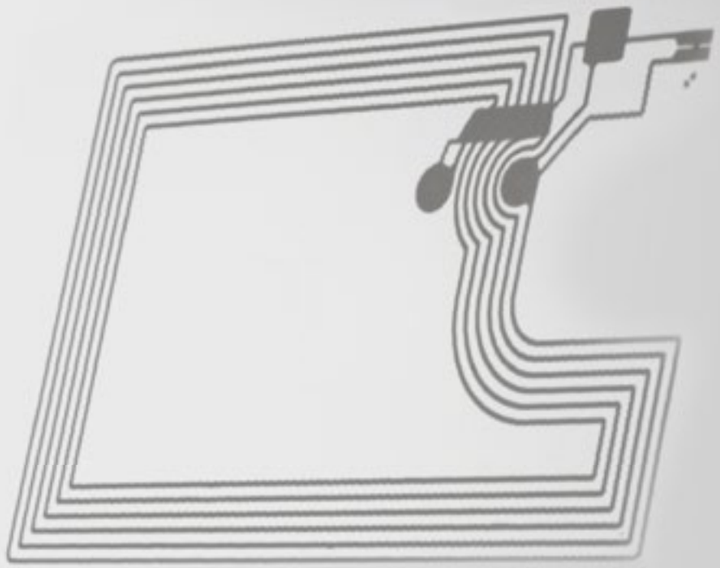


Membrane switch
ink system

	Description	Drying / Curing	Benefit
Bectron® CP 6612	Conductive silver/ carbon ink	10 min at 120°C	Long screen open time, 0.025 Ω/sq/mil
Bectron® CP 6618	Conductive silver/ carbon ink	3 min at 120°C	Very fast curing version, 0.025 Ω/sq/mil
Bectron® CP 6619	Conductive silver/ carbon ink	5 min at 120°C	Fast curing version optimized for a long screen open time, 0.025 Ω/sq/mil
Bectron® CP 6662	Conductive silver ink	10 min at 120°C	Optimized for membrane switches, very flexible, long screen open time, good adhesion to untreated and treated PET films, 0.010 Ω/sq/mil
Bectron® DP 8442	Insulating ink green	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8443	Insulating ink blue	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8444	Insulating ink colorless	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8446	Insulating ink green and flexible	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® GP 9552	Conductive carbon ink	10 min at 120°C	Good adhesion to treated PET films, 40 Ω/sq/mil
Bectron® GP 9553	Conductive carbon ink	10 min at 120°C	Good adhesion to silver and untreated PET films, 40 Ω/sq/mil

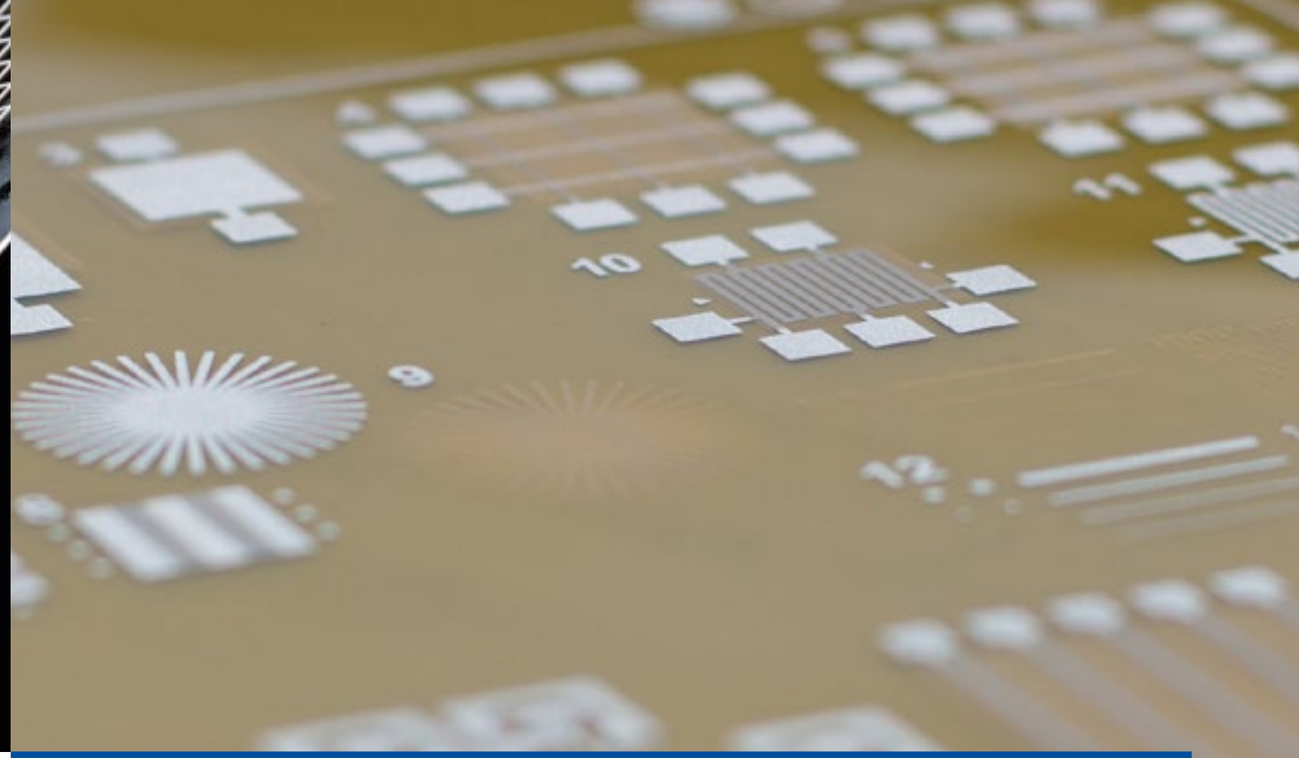
Antenna
ink system

	Description	Drying / Curing	Benefit
Bectron® CP 6662	Conductive silver ink	10 min at 120°C	Very flexible, long screen open time, good adhesion to untreated and treated PET films, 0.010 Ω/sq/mil
Bectron® CP 6668	Conductive silver ink	3 min at 120°C	Very fast curing version, 0.010 Ω/sq/mil
Bectron® CP 6669	Conductive silver ink	5 min at 120°C	Fast curing version optimized for a long screen open time, 0.010 Ω/sq/mil
Bectron® CP 6671	UV-curable conductive silver ink	5 m/min at >700 mJ/cm² UVA and 2 min at 100°C	UV-curable and ultra-low VOC, superior screen open time, 0.030 Ω/sq/mil
Bectron® CP 6681	Conductive silver ink	10 min at 120°C	Optimized for PC films, 0.015 Ω/sq/mil
Bectron® DP 8442	Insulating ink green	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8443	Insulating ink blue	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8444	Insulating ink colorless	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8445	Insulating ink colorless and flexible	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films



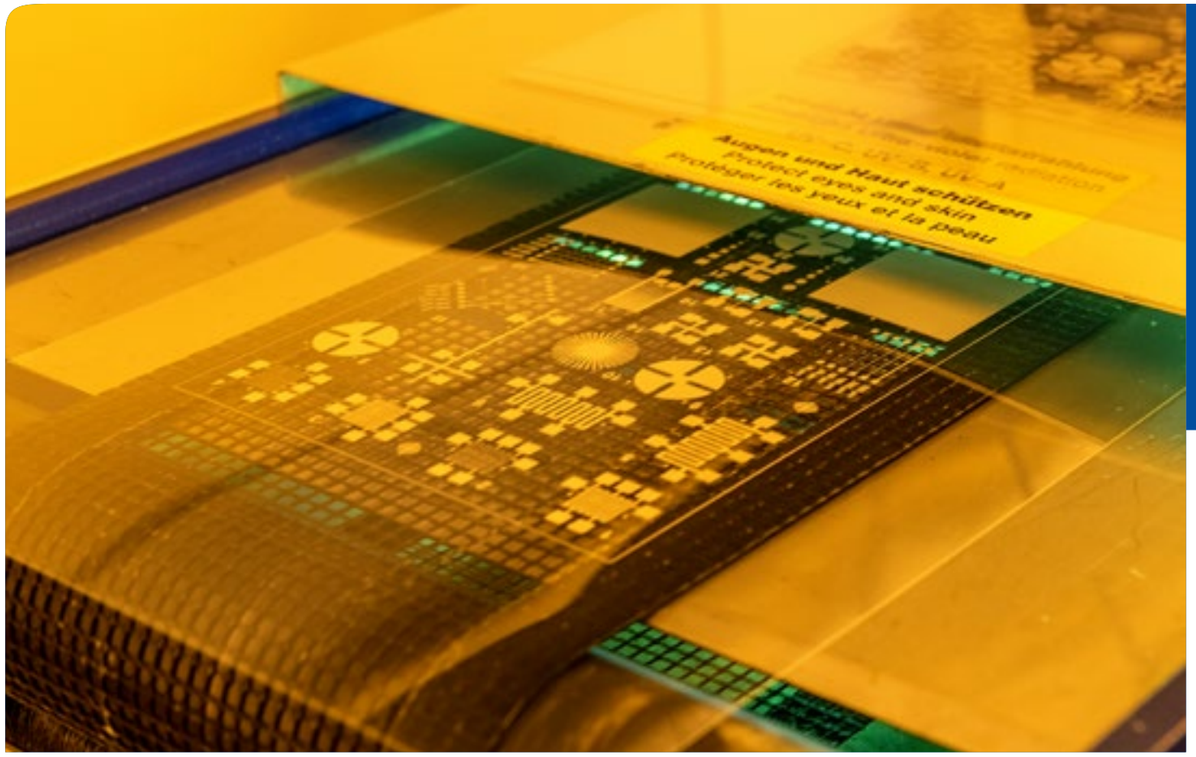
In-mold-electronics (IME)
ink system

	Description	Drying / Curing	Benefit
Bectron® CP 6680	Thermoformable conductive silver ink	10 min at 120°C	Optimized for in-mold-electronics, 0.025 Ω/sq/mil
Bectron® CP 6681	Conductive silver ink	10 min at 120°C	Optimized for PC films, 0.015 Ω/sq/mil
Bectron® DP 8480	Thermoformable insulating ink	10 min at 120°C	Optimized for in-mold electronics, good adhesion to silver and PC films
Bectron® GP 9580	Thermoformable conductive carbon ink	10 min at 120°C	Optimized for in-mold-electronics, good adhesion to silver and PC films, 55 Ω/sq/mil



High temperature
ink system

	Description	Drying / Curing	Benefit
Bectron® CP 6690	High temperature conductive silver ink	10 min at 160°C	Optimized for high temperature applications up to 200°C, good adhesion on ELAN-Film HT 180, Kapton and glass, 0.015 Ω/sq/mil
Bectron® DP 8491	High temperature insulating ink	10 min at 160°C	Optimized for high temperature applications up to 200°C, good adhesion to ELAN-Film HT 180, Kapton and glass

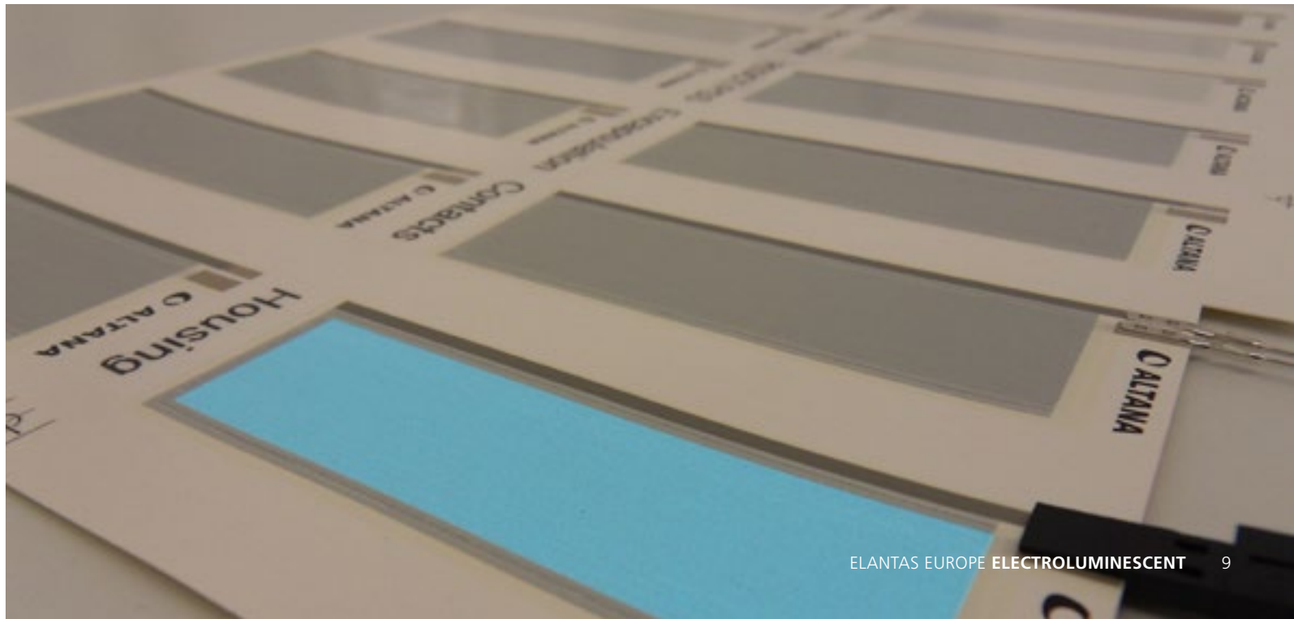


Silver and insulating UV-curable
ink system

	Description	Drying / Curing	Benefit
Bectron® CP 6671	UV-curable conductive silver ink	5 m/min at >700 mJ/cm² UVA and 2 min at 100°C	UV-curable and ultra-low VOC, superior screen open time, 0.030 Ω/sq/mil
Bectron® DP 8442	Insulating ink green	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8443	Insulating ink blue	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8444	Insulating ink colorless	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8445	Insulating ink colorless and flexible	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8446	Insulating ink green and flexible	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8481	Insulating ink transparent	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, treated PET and PC films

Electroluminescent
ink system

	Description	Drying / Curing	Benefit
Bectron® CP 6662	Conductive silver ink	10 min at 120°C	Very flexible, long screen open time, good adhesion to untreated and treated PET films, 0.010 Ω/sq/mil
Bectron® EL 7001 AB	Active phosphor blue ink	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7002 AC	Active phosphor cyan ink	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7003 AG	Active phosphor green ink	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7030 D	Dielectric ink	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7080 TC	Transparent conductive ink	5 min at 100°C	Paper and various films like PET or PC
Bectron® EL 7090 E	Encapsulation ink	5 m/min at >200 mJ/cm² UVA	PEDOT, paper and various films like PET or PC; transparent insulation varnish



Overview
screen printing inks

Conductive silver inks

- Based on solvents or UV-curable and ultra-low VOC
- Fast processing
- Good adhesion to glass, paper and various films such as PET or PC
- Highly flexible films
- Thermoformable
- Easy to clean

	Description	Drying / Curing	Benefit
Bectron® CP 6662	**Conductive silver ink**	10 min at 120°C	Very flexible, long screen open time, good adhesion to untreated and treated PET films, 0.010 Ω/sq/mil
Bectron® CP 6663	**Conductive silver ink**	10 min at 120°C	Optimized for membrane switches, 0.015 Ω/sq/mil
Bectron® CP 6666	**Conductive silver ink**	10 min at 120°C	Good adhesion to glass, 0.025 Ω/sq/mil
Bectron® CP 6667	**Conductive silver ink**	10 min at 120°C	Optimized for printing finer lines, very flexible, long screen open time, good adhesion to untreated and treated PET films, 0.015 Ω/sq/mil
Bectron® CP 6668	**Conductive silver ink**	3 min at 120°C	Very fast curing version, 0.010 Ω/sq/mil
Bectron® CP 6669	**Conductive silver ink**	5 min at 120°C	Fast curing version optimized for a long screen open time, 0.010 Ω/sq/mil
Bectron® CP 6671	**UV-curable conductive silver ink**	5 m/min at >700 mJ/cm² UVA and 2 min at 100°C	UV-curable and ultra-low VOC, superior screen open time, 0.030 Ω/sq/mil
Bectron® CP 6680	**Thermoformable conductive silver ink**	10 min at 120°C	Optimized for in-mold-electronics, 0.025 Ω/sq/mil
Bectron® CP 6681	**Conductive silver ink**	70 – 120°C	Optimized for PC films, other drying temperatures possible on various other substrates (e.g. 70°C on TPU), 0.015 Ω/sq/mil
Bectron® CP 6690	**High temperature conductive silver ink**	10 min at 160°C	Optimized for high temperature applications up to 200°C, good adhesion on ELAN-Film HT 180 and Kapton and glass, 0.015 Ω/sq/mil

Conductive carbon inks

- Fast processing
- Based on solvents
- Good adhesion to various films such as PET
- Highly flexible films
- Easy to clean

	Description	Drying / Curing	Benefit
Bectron® GP 9552	**Conductive carbon ink**	10 min at 120°C	Good adhesion to treated PET films, 40 Ω/sq/mil
Bectron® GP 9553	**Conductive carbon ink**	10 min at 120°C	Good adhesion to silver and untreated PET films, 40 Ω/sq/mil
Bectron® GP 9555	**Conductive carbon ink**	10 min at 120°C	Good adhesion to glass, 50 Ω/sq/mil
Bectron® GP 9580	**Thermoformable conductive carbon ink**	10 min at 120°C	Optimized for in-mold-electronics, good adhesion to silver and PC films, 55 Ω/sq/mil

Other conductive inks

	Description	Drying / Curing	Benefit
Bectron® CP 6612	**Conductive silver/ carbon ink**	10 min at 120°C	Long screen open time, 0.025 Ω/sq/mil
Bectron® CP 6618	**Conductive silver/ carbon ink**	3 min at 120°C	Very fast curing version, 0.025 Ω/sq/mil
Bectron® CP 6619	**Conductive silver/ carbon ink**	5 min at 120°C	Fast curing version optimized for a long screen open time, 0.025 Ω/sq/mil

Insulating inks

- Transparent or colored
- Fast processing
- Good adhesion to glass, paper and various films such as PET or PC
- Flexible films
- Easy to clean

	Description	Drying / Curing	Benefit
Bectron® DP 8442	**Insulating ink green**	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8443	**Insulating ink blue**	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8444	**Insulating ink colorless**	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8445	**Insulating ink colorless and flexible**	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8446	**Insulating ink green and flexible**	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, untreated and treated PET films
Bectron® DP 8480	**Thermoformable insulating ink**	10 min at 120°C	Optimized for in-mold electronics, good adhesion to silver and PC films
Bectron® DP 8481	**Insulating ink transparent**	5 m/min at >600 mJ/cm² UVA	Good adhesion to silver, treated PET and PC films
Bectron® DP 8491	**High temperature insulating ink**	10 min at 160°C	Optimized for high temperature applications up to 200°C, good adhesion to ELAN-Film HT 180 and Kapton and glass

Electroluminescent UV-curable inks

- Electroluminescent UV system
- Fast processing, and mainly VOC-free
- Improved light outcoupling
- Good adhesion to PEDOT, ITO, paper and various films such as PET or PC
- Available colors: green, blue and cyan

	Description	Drying / Curing	Benefit
Bectron® EL 7001 AB	**Active phosphor blue ink**	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7002 AC	**Active phosphor cyan ink**	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7003 AG	**Active phosphor green ink**	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7030 D	**Dielectric ink**	5 m/min at >600 mJ/cm² UVA	PEDOT, paper and various films like PET or PC
Bectron® EL 7080 TC	**Transparent conductive ink**	5 min at 100°C	Paper and various films like PET or PC
Bectron® EL 7090 E	**Encapsulation ink**	5 m/min at >200 mJ/cm² UVA	PEDOT, paper and various films like PET or PC; transparent insulation varnish

Adhesives

	Description	Drying / Curing	Benefit
Bectron® CG 5660	**Electronic conductive adhesive (ECA)**	45 min at 90°C or 10 min at 130°C	Single component, conductive, epoxide, adhesive for applications in electronics and printed electronics, connecting electronic components, screen printable, 0.400 Ω/sq/mil
Bectron® CG 5661	**Electronic conductive adhesive (ECA)**	45 min at 90°C or 10 min at 130°C	Single component, conductive, epoxide, adhesive for applications in electronics and printed electronics, connecting electronic components, dispensable by jetting, 0.400 Ω/sq/mil
Elan-glue® EP 5350	**Insulating electronic adhesive**	Thermal cure (90–130°C)	Single component, epoxide, fixing electronic components
Elan-glue® EP 5360	**Electronic Non-Conductive Adhesive (NCA)**	45 min at 90°C or 10 min at 130°C	Single Component, Epoxide, Fixing of electronic components, also possible with Bectron® CG 5660 wet-in-wet / ECA-NCA-pair.
Elan-glue® EP 5611	**Insulating electronic adhesive**	UV + thermal cure	Single component, epoxide, globe top for electronic components
Elan-glue® EP 5620	**Insulating and transparent electronic adhesive**	Thermal cure (80–90°C)	Single component, epoxide, transparent, globe top in thin layer
Elan-glue® AC-Series	**Insulating and transparent electronic adhesive**	UV-cure only	Single component, acrylates, transparent, globe top in thick layer, various hardness, fixing without heat

Printing sundries

	Description	Drying / Curing	Benefit
Bectron® AP 2555	**Modifier**	10 min at 120°C	Additive to adjust the resistivity of Bectron® GP 9555
Bectron® CT 6660	**Thinner**		Thinner for Bectron® CP 6612, Bectron® CP 6618, Bectron® CP 6619, Bectron® CP 6662, Bectron® CP 6668, Bectron® CP 6669, Bectron® CP 6680 and Bectron® CP 6681

Your added value

Discover the superior performance and processing of our functional inks. We offer special formulations, printing tests and characterization in our laboratory according to your specifications (application, layout and substrate). Our technical team would be pleased to support you on site.

Worldwide Locations

ELANTAS GmbH
Wesel – Germany

ELANTAS Europe GmbH
Hamburg – Germany

ELANTAS Europe S.r.L.
Ascoli Piceno, Collecchio, Quattordio – Italy

ELANTAS PDG, Inc.
St. Louis, Olean – U.S.A.

ELANTAS Isolantes
Elétricos do Brasil Ltda.
Cerquilho – Brazil

ELANTAS Beck India Ltd.
Ankleshwar, Pune – India

ELANTAS Zhuhai Co. Ltd.
Zhuhai – P.R. China

ELANTAS Tongling Co. Ltd.
Tongling – P.R. China

ELANTAS Malaysia Sdn. Bhd.
Kapar – Malaysia

ELANTAS worldwide

ELANTAS belongs to the ALTANA group and is a leading manufacturer of insulating and protective materials for the electrical and electronics industry. The product portfolio includes wire enamels, impregnating resins and varnishes, casting and potting resins, electronic coatings, adhesives, flexible electrical insulation materials, specialty coatings, tooling and composite materials and products for printed electronics.

ELANTAS is as global as the printed electronics industry and operates a worldwide network of production facilities. Our local expertise is backed by a worldwide network of R&D, application, and testing laboratories. Our customer support is no less global. Our worldwide technical sales team ensures that you get full service across all locations. Wherever you need us, we’re close by.

This extensive international presence gives us the flexibility and resilience needed to serve the global printed electronics industry. We are certified according to DIN EN ISO 9001, DIN EN ISO 14001. Some of our sites are certified according to IATF 16949.

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