

Insulating materials play an important role in all areas of electrotechnics. For several decades, ELANTAS Europe has developed and produced suitable polymers for the insulation of electrical devices and electronic components as well as for wire enamels. Such chemicals as unsaturated polyester, silicones, epoxides and many others are available for a wide range of different application methods, such as dipping, casting & potting or dispensing.

In its Printed Electronics product line, besides electrically conductive screen printing pastes ELANTAS Europe additionally offers insulating pastes under the brand name Bectron® DP.

Screen-printable insulators find their use, for example, in areas like in membrane switches, in-mould electronics, hybrid electronics (antennas and sensors), printed heating and smart textile areas. Beside the demand on materials of components in their final application, other important selection criteria are decisive for an insulator, such as the substrate or undercoat, as well as the specific drying and curing conditions of existing machinery parks.

Typical insulator layer thicknesses in screen printing is in the range of 1-30 µm, which can be influenced by the choice of the screen mesh material. Particularly UV-hardened insulators are characterised by extremely fast curing and simple cleaning. Besides their high mechanical flexibility, Bectron® DP insulators exhibit excellent dielectric properties and allow overprinting. Multi-layer printed designs, e.g. for membrane switches or antennas, can be realised easily.

Contact us, convince yourself and do not hesitate to ask for a sample. For questions about the choice of appropriate materials or application-specific topics, please feel free to contact us.

Product	Colour	Application	Substrate	Chemistry	Curing/Drying Conditions
BECTRON® DP 8442	Green	Membrane switches, RFID antennas, sensors	- PET film untreated - PET film treated - ELAN-Film HT 180	Arcylic	UV-dryer (Mercury lamp)
BECTRON® DP 8443	Blue				
BECTRON® DP 8444	Colourless				
BECTRON® DP 8445	Colourless	Suitable for more flexible applications	- PET film untreated - PET film treated - PC film	Arcylic	UV-dryer (Mercury lamp)
BECTRON® DP 8446	Green				
BECTRON® DP 8480	Colourless	In-mold electronics	- PC film	Thermoplastic	Hot air dryer
BECTRON® DP 8481	Transparent	Insulator and protection	- PC film	Acrylic	UV-dryer (Mercury lamp)
BECTRON® DP 8491	Colourless	High temperature applications	- ELAN-Film HT 180 - Kapton - Glass	Unsaturated polyester	Hot air dryer

ELANTAS Europe is a leading manufacturer of insulating and protective materials for the electrical and electronics industry. The Product Line Printed Electronics offers a wide range of 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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