



ELECTRONIC MATERIALS



Printed Electronics

Advanced ink and coating technology that enhance a wide variety of products

PPG, one of the world's largest coatings manufacturers, offers a full line of electrically conductive, resistive and dielectric inks and conductive coatings for radio-frequency interference/electromagnetic interference (RFI/EMI) suppression. Our advanced technology inks and coatings can be used in a wide variety of products, including smart phones, tablets, interactive and electrochromic displays, biomedical sensors, printed keypads, industrial membrane switch controls, RFID tags and other products with printed circuitry.

Please contact your PPG representative for more information or to evaluate specific adhesion specifications.

Silver Inks

Product	Conductivity	Application Method	Features	Benefits	Common Uses
XCSD-470	<.008 Ω/sq./25μ	Rotary and flat-bed screen printing	High-performance RFID and mobile antennas with added flexibility/durability compared to XCSD-006N	PPG TESLIN® substrate compatible with excellent conductivity and printability	High-performance RFID, credentials and mobile antennas
XCSD-006N	<.006 Ω/sq./25μ	Flat-bed or rotary screen printing	High-performance RFID and mobile antennas	Provides excellent conductivity, printability and surface attenuation	High performance RFID and mobile antennas
XCMSR-013	<.013 Ω/sq./25μ	Flat-bed or rotary screen printing	High-volume printed RFID antennas and smart labels offering a fast cure and excellent durability	Ideal for high-speed printing applications	High-volume printed RFID antennas and smart labels
XCMS-015	<.015 Ω/sq./25μ	Flat-bed screen printing	Fine-line and printable, with excellent adhesion to ITO-sputtered surfaces and excellent durability	One component system that competes with traditional two component epoxy based systems offering lower wastage and increased performance	Bus bars
XCMS-016	<.015 Ω/sq./25μ	Syringe dispensable			
XPCS-020	<.020 Ω/sq./25μ	Flat-bed screen printing	Polycarbonate compatible with excellent adhesion to both treated and untreated materials, offering low resistance with low Ag	Ideal for standard printed circuitry and EMI shielding grids where sensitive substrates and cost are a concern	Standard printed circuitry and EMI shielding grids
XCTS(R)-177	<.016 Ω/sq./25μ	Flat-bed or rotary screen printing	Excellent rotary screen printability for EMI shielding grids	Teslin substrate compatible	RFID and credentials
XCMB-700	<.020 Ω/sq./25μ	Flat-bed screen printing	Cost-effective Ag/C ink with excellent adhesion to PET and good flexibility	Ideal for sensor applications and other economically sensitive printed circuitry	Smart sensor applications



We protect and beautify the world®

Medical Electrode Ink

Product	Conductivity	Application Method	Features	Benefits	Common Uses
XSCL-76971	.040 Ω/sq./25μ	Flat-bed screen printing	Excellent adhesion to PET, good screen residence time and performance with 80:20 silver / silver chloride ratio	Ideal for medical electrode applications	Medical electrodes, biosensors

Carbon Inks

Product	Conductivity	Application Method	Features	Benefits	Common Uses
XCMC-401F	<40 Ω/sq./25μ	Flexographic printing	Quick-curing, easy-to-clean, stable-resistance carbon circuitry with good adhesion to PET and excellent flexibility	Ideal for membrane switches and medical electrodes	Membrane switches, medical electrodes, biosensors, printed resistors
XCMC-617	<30 Ω/sq./25μ	Flat-bed or rotary screen printing	Quick-curing, easy-to-clean, stable-resistance carbon circuitry with good adhesion to PET and excellent flexibility	Excellent blending ink for customized resistivities	Blending ink for customized resistivities, membrane switches, medical electrodes, biosensors, printed resistors
XRMC-76579	<30 Ω/sq./25μ	Flat-bed or rotary screen printing	Quick-curing, easy-to-clean, stable-resistance carbon circuitry with good adhesion to PET and excellent flexibility	Thermoset printable ink with a 6-month shelf life	Membrane switches, medical electrodes, printed resistors
XCMC-810	<20 Ω/sq./25μ	Flat-bed screen printing	Quick-curing, easy-to-clean, stable-resistance carbon circuitry with good adhesion to PET and excellent flexibility	Low resistance carbon formulation ideal for membrane switches and medical electrodes	Membrane switches, medical electrodes, biosensors, printed resistors

Dielectric Inks

Product	Voltage Breakdown	Application Method	Features	Benefits	Common Uses
XHCD-506	Withstands 1,500 volts @ 25μ	Flat-bed and rotary screen printing	Excellent adhesion to PET and Cu foil, with good flexibility, and excellent resistance to heat and humidity	Ideal for medical, membrane switch and antenna applications	Ideal for medical, membrane switches and antenna applications
XHCD-76339	N/A	Flat-bed screen printing	Excellent adhesion to PET excellent resistance to heat and humidity	Ideal for EL lamps	Ideal for EL lamps

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