

SUBSTRATE	COMMON TRADENAMES*	MATERIAL APPLIED BY MICROPEN	FUNCTION ADDED	APPLICATIONS DEMONSTRATED
POLYMERS				
Polyethylene Terephthalate (PET)	Mylar, [®] Melinex [®]	Ag, W	Conductivity, Radiopacity	Cardiac ablation balloon, lead on cardiac ablation wire guide
Polyurethane	Texin, [®] Desmopan, [®] Tecothane, [®] Estane, [®] Pellethane [®]	Ag, TiO2	Conductivity, Opacity	Capsule antenna, electrode on sheath, visualization
Silicone	SilMedic, [®] BioSil, [™] Silikophen, [®] Nusil [™]	Ag, W	Conductivity, Radiopacity	Atrial ablation balloon, flexible brain stimulation electrode
Silicone-Urethane Copolymer	Elast-Eon [™]	Ag, W	Conductivity, Radiopacity	Visualization
Polyamide (Nylon)	Vestamid, [®] Grilamid [®]	Ag, W	Conductivity, Radiopacity	Sensing on balloon catheter
Polyether-Amide	PEBAX [®]	W, Ag	Conductivity, Radiopacity	Catheter stimulation and sensing, ablation catheter
Polyetherimide	Ultem [®]	Ag	Conductivity	Stimulation
Polyetherether Ketone	Vestakeep, [®] PEEK-Optima [®]	Ag, W	Conductivity, Radiopacity	Heater
Polysulfone	Radel, [®] Udel, [®] Fortron [®]	Ag	Conductivity	Sensing
Polytetrafluoroethylene (Etched)	Teflon [®]	W, Ag	Conductivity, Radiopacity	Visualization
Polycarbonate	Makrolon, [®] Calibre, [™] Lexan [®]	W, Ag	Radiopacity, Conductivity	Sensing on surgical device
Polyvinylidene Fluoride	Dyflor, [®] Kynar [®]	W	Radiopacity	Visualization
Polyvinyl Chloride	Nakan, [®] Chlorite [™]	Ag	Conductivity	Sensing on endotracheal tube
Polyhydroxyalkanoate	Biopol, [™] Mirel [™]	W	Radiopacity	Visualization
Liquid Crystal Polymer	Vectra [®]	Ag	Conductivity	Heater, thermistor
Poly(P-Xylylene)	Parylene [™]	Ag	Conductivity	Balloon electroporation
Styrene-Butadiene	Styrolux [®]	Ag	Conductivity	Ophthalmic electroporation
METALS				
Stainless Steel	316SS, 304SS, 420SS	Various polymers, Ag	Dielectrics, Conductors	Heaters
Titanium	—	Au	Conductor	Sensing
Silicon	—	Various polymers, Ag	Dielectrics, Conductors	Sensing
CERAMICS				
Alumina	—	Ag, Au, Pd, Pt	Conductor, Capacitor,	Electrocauterization, heaters, sensors
Silica	Pyrex, [®] Glass, Quartz	Ag, Various polymers	Conductors, Protective layers	Heaters