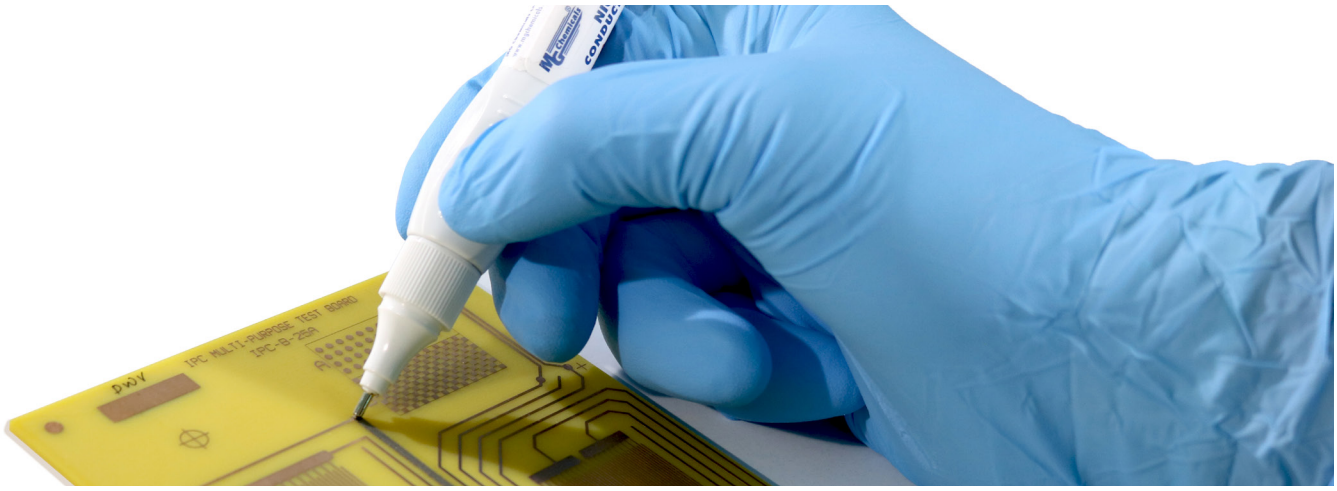
Conductive Pens



Easily draw and repair conductive traces

MG Chemicals offers conductive pens that allow for easy and timely repair of defective circuit traces. They dispense acrylic lacquer pigmented with either carbon powder, nickel flake, or silver flake. Each pigment provides a different resistivity, making each pen suitable for different applications.

Features and Benefits

- Create durable, corrosion resistant, conductive connections
- Tack free in minutes
- Adheres to ABS, PLA, and other 3D Printer Filaments
- Typical trace width: 1.5 - 2 mm
- For use on smooth, flat, and hard surfaces
- Does not contain toluene, xylene, or MEK

Applications

- Sketch on conductive traces for prototypes
- Creating jumpers, bridges and through holes
- Repair circuits in controllers, keyboards and PCBs

838AR-P - Carbon conductive pen for low conductivity repairs like keyboards

841AR-P - Nickel conductive pen for moderate conductivity repairs like bridges and PCB trace

842AR-P/842AR-PS - Silver conductive pen for high conductivity repairs like connecting through holes

MG Chemicals 1210 Corporate Drive, Burlington, Ontario, Canada L7L 5R6
North America: +(1)800-340-0772 **International:** +(1) 905-331-1396 **Europe:** +(44)1663 362888

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Conductive Pens

	838AR-P	841AR-P	842AR-P/842AR-PS
UNCURED PROPERTIES			
Conductive filler	Carbon	Nickel	Silver
Format	Liquid	Liquid	Liquid
Color	Black	Dark grey	Light grey
Percent solids	15%	57%	61%
Density @ 25 °C [77 °F]	0.89 g/mL	1.70 g/mL	1.70 g/mL
Viscosity @ 25 °C [77 °F]	114 cP	1 460 cP	873 cP
Calculated VOC	519 g/L	236 g/L	206 g/L
Recoat time	1 min	1 min	1 min
Cure time @ 22 °C [71.6 °F]	24 h	24 h	24 h
Cure time @ 65 °C [149 °F]	30 min	30 min	30 min
Approximate linear coverage	74 m	30 m	50 m
CURED PROPERTIES			
Resistivity	0.63 Ω·cm	0.004 Ω·cm	0.0001 Ω·cm
Surface resistance @ 50 µm	100 Ω/sq	0.49 Ω/sq	0.015 Ω/sq
Constant service temperature	-40—120 °C [-40—248 °F]	-40—120 °C [-40—248 °F]	-40—120 °C [-40—248 °F]
Adhesion (ABS/PC)	5B	5B	5B
Pencil hardness	H, hard	3H, hard	3H, hard
Magnetic class	Diamagnetic	Ferromagnetic	Diamagnetic
AVAILABLE PACKAGING			
Net content	5 mL, 4.44 g	5 mL, 7.57 g	2 mL, 3.65 g 5 mL, 9.14 g

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