## **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
- Adheres to copper, aluminum, ceramics, wood, and most electronic substrates
- 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** - Silver conductive pen for high conductivity repairs like connecting through holes



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# **Conductive Pens**



	838AR-P	841AR-P	842AR-P
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	5 mL, 9.14 g



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