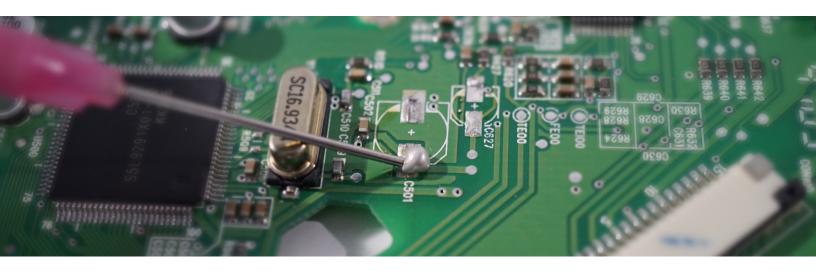
Electrically Conductive Adhesives





Silver Conductive Epoxy for the Assembly and Repair of Electronics

MG Chemicals offers silver conductive epoxy for the assembly and repair of electronics. It provides strong adhesion to many surfaces where soldering is not possible.

Features and Benefits

- Creates strong permanent electrical connections
- · Excellent electrical and thermal conductivity
- Room temperature storage

Applications

- · Repairing damaged circuits
- Creating jumpers, bridging, and gap filling
- · Bonding heat sensitive components
- · Bonding to conductive polymers
- · Bonding to flexible circuits
- · Bonding to gold, aluminum, brass, and bronze
- · Bonding to glass
- · Die attachment in LEDs and semiconductors

1-Part – Unlimited Working Time

 $\begin{array}{l} \textbf{9410}-\text{Resistivity of }1.8 \text{ x }10^{\text{-3}} \ \Omega \cdot \text{cm}, \ \text{T}_{\text{g}} \text{ of }96^{\circ}\text{C}, \\ \text{heat cure only} \end{array}$

2-Part – 20 Minute Working Time

8331D – Resistivity of 1.8 x $10^{-3} \Omega$ ·cm **8330D** – Resistivity of 5.3 x $10^{-4} \Omega$ ·cm

2-Part – 4 Hour Working Time

8331S – Resistivity of 6.0 x $10^{-3} \Omega$ ·cm, heat cure only **8330S** – Resistivity of 7.0 x $10^{-4} \Omega$ ·cm, heat cure only

Electrically Conductive Adhesives



	8330D	8331D	8330S	8331S	9410
UNCURED PROPERTIES					
Number of components	2	2	2	2	1
Mixed density [g/mL]	3.22	2.40	3.06	2.42	2.34
Working time	20 min	20 min	4 h	4 h	Unlimited
Service cure @ 22 °C	65 min	65 min	_	_	_
Room temp. cure [h]	6	6	Heat cure	Heat cure	Heat cure
Heat cure [min @ °C]	10 @ 65	10 @ 65	120 @ 65	120 @ 65	60 @ 90
	5 @ 80	5 @ 80	60 @ 80	60 @ 80	30 @ 100
			30 @ 100	30 @ 100	7 @ 120
CURED PROPERTIES					
Resistivity [Ω·cm]	5.3 x 10 ⁻⁴	1.8 x 10 ⁻³	7.0 x 10 ⁻⁴	6.0 x 10 ⁻³	1.8 x 10 ⁻³
Service temperature range [°C]	-50 to 150	-50 to 150	-40 to 150	-40 to 150	-65 to 145
Glass transition temperature (Tg) [°C]	40	35	34	34	96
CTE prior Tg [ppm/°C]	63	58	97	78	42
CTE after Tg [ppm/°C]	363	234	208	158	150
Thermal conductivity @ 25 °C [W/(m·K)]	2.0	1.5	2.4	1.3	1.1
Thermal diffusivity @ 25 °C [mm²/s]	1.1	0.9	1.2	0.7	0.7
Specific heat capacity @ 25 °C [J/(g·K)]	0.6	0.7	0.6	0.8	0.8
Color	Silver grey				
Hardness	84D	78D	73D	60D	70D
Tensile strength [N/mm ²]	8.3	13	9.0	14	N/A
Compressive strength [N/mm ²]	75	69	36	65	26
Lap shear (stainless steel) [N/mm ²]	3.6	5.6	1.7	4.5	2.6
Lap shear (aluminum) [N/mm²]	2.6	5.1	1.2	7.1	2.8
Refer to TDS for more information.					
AVAILABLE PACKAGING					

Net content

6 mL (2 syringe kit) 50 mL (2 jar kit)

6 mL ge kit) (2 syringe kit) 50 mL) (2 jar kit) 6 mL6 mL(2 syringe kit)(2 syringe kit)50 mL50 mL(2 jar kit)(2 jar kit)200 mL200 mL(2 can kit)(2 can kit)

3 mL (syringe) 30 mL (syringe)