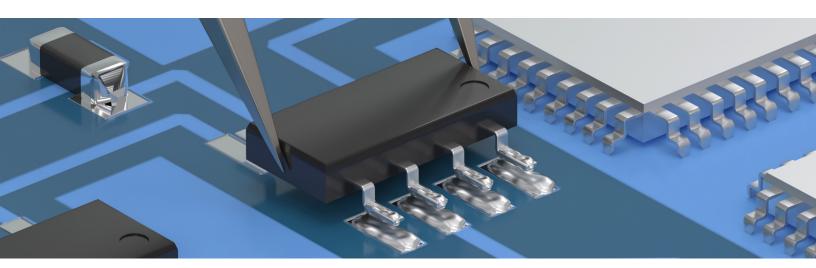
## **1-Part Epoxy Adhesives**





### **1-Part Adhesives for Easy Manufacturing Processes**

MG Chemicals offers a full line of 1-part epoxy adhesives to meet the growing demand for ease of application in the manufacturing process. These adhesives require no mixing, and offer unlimited working time. Our 1-part epoxies enhance productivity by simplifying production processes and storage requirements.

### **Features and Benefits**

- · Easy to dispense-no mixing required
- · Unlimited working time
- · Low to moderate cure temperatures
- · Extended shelf life at room temperatures
- Excellent adhesion to common electronics substrates and components

### **Applications**

- Surface Mount Technology (SMT)
- Chip bonding
- LED manufacturing
- Bonding dissimilar substrates
- Telecommunications equipment
- Medical devices
- Automotive components

#### **General Bonding**

9410

- 9310 Surface Mount Adhesive (SMA) and chip bonding
  - · Unlimited working time

#### **Electrically Conductive**

- High conductivity, high Tg
  - Resistivity of 1.8 x  $10^{-3} \Omega \cdot cm$
  - · Unlimited working time

#### **Thermally Conductive**

- 9460TC High thermal conductivity of 0.8 W/(m·K)
  - · Unlimited working time

# **1-Part Epoxy Adhesives**



	9310	9410	9460TC
UNCURED PROPERTIES			
Number of components	1	1	1
Mixed density [g/mL]	1.15	2.34	1.64
Working time	Unlimited	Unlimited	Unlimited
Service cure @ 22 °C	_	N/A	—
RT cure [h]	_	N/A	—
Heat cure [min @ °C]	30 @ 100	60 @ 90	120 @ 80
	10 @ 120	30 @ 100	60 @ 100
		7 @ 120	30 @ 120
CURED PROPERTIES			
Resistivity [Ω·cm]	9.3 x 10 <sup>12</sup>	1.8 x 10 <sup>-3</sup>	7.4 x 10 <sup>16</sup>
Service temperature range [°C]	-55 to 140	-65 to 145	-65 to 150
Glass transition temperature (T9) [°C]	113	96	106
CTE prior T₃ [ppm/°C]	56	42	36
CTE after Tց [ppm/°C]	185	150	72
Thermal conductivity @ 25 °C [W/(m·K)]	0.2	1.1	0.8
Thermal diffusivity @ 25 °C [mm <sup>2</sup> /s]	0.2	0.7	0.5
Specific heat capacity @ 25 °C [J/(g·K)]	1.4	0.8	1.2
Color	Yellow	Silver grey	White
Hardness	84D	70D	86D
Tensile strength [N/mm <sup>2</sup> ]	9.4	N/A	9.1
Compressive strength [N/mm <sup>2</sup> ]	103	26	78
Lap shear (stainless steel) [N/mm <sup>2</sup> ]	8.5	2.6	6.0
Lap shear (aluminum) [N/mm²]	6.2	2.8	3.2
Refer to TDS for more information. N/A=Not Available			

#### **AVAILABLE PACKAGING**

Net content

10 mL (syringe) 300 mL (cartridge)

3 mL (syringe) 30 mL (syringe) 3 mL (syringe) 10 mL (syringe)





