



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

9310 – Surface Mount Adhesive (SMA)

Electrically Conductive

9410 – High conductivity, high T_g

9400 – Extreme conductivity

Thermally Conductive

9460TC – High thermal conductivity

1-Part Epoxy Adhesives



	9310	9400	9410	9460TC
UNCURED PROPERTIES				
Number of components	1	1	1	1
Mixed density [g/mL]	1.15	3.14	2.34	1.64
Working time	Unlimited	Unlimited	Unlimited	Unlimited
Service cure @ 22 °C	—	N/A	N/A	—
RT cure [h]	—	N/A	N/A	—
Heat cure [min @ °C]	30 @ 100 10 @ 120	120 @ 70 30 @ 80	60 @ 90 30 @ 100 7 @ 120	120 @ 80 60 @ 100 30 @ 120

CURED PROPERTIES				
Resistivity [$\Omega \cdot \text{cm}$]	9.3×10^{12}	3.1×10^{-4}	1.8×10^{-3}	7.4×10^{16}
Service temperature range [°C]	-55 to 140	-55 to 140	-65 to 145	-65 to 150
Glass transition temperature (T_g) [°C]	113	36	96	106
CTE prior T_g [ppm/°C]	56	76	42	36
CTE after T_g [ppm/°C]	185	100	150	72
Thermal conductivity @ 25 °C [W/(m·K)]	0.2	4.7	1.1	0.8
Thermal diffusivity @ 25 °C [mm ² /s]	0.2	2.2	0.7	0.5
Specific heat capacity @ 25 °C [J/(g·K)]	1.4	0.7	0.8	1.2
Color	Yellow	Silver grey	Silver grey	White
Hardness	84D	74D	70D	86D
Tensile strength [N/mm ²]	9.4	2.9	N/A	9.1
Compressive strength [N/mm ²]	103	18	26	78
Lap shear (stainless steel) [N/mm ²]	8.5	2.9	2.6	6.0
Lap shear (aluminum) [N/mm ²]	6.2	3.2	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) 30 mL (syringe)	3 mL (syringe) 10 mL (syringe)
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