

# 9310



## Surface Mount Adhesive

9310 is a 1-part, fast curing, electrically insulative epoxy adhesive. It is a smooth, thixotropic paste that stays in place without tailing when dispensed.

This surface mount adhesive is specially designed for die attach applications in electronics assembly operations. It can be readily used in manual, pneumatic and robotic dispensing processes. It can also be used as a general-purpose adhesive for household, industrial and manufacturing applications.

It has an unlimited working life at room temperature and does not require mixing or frozen storage.



## Features & Benefits

- Consistent dot profile
- No mixing, unlimited working time at room temperature
- Room temperature storage
- Strong adhesion to a variety of substrates
- Suitable for automated dispensing
- Fast curing

## Available Packaging

| Cat. No.   | Packaging | Net Vol. | Net Wt. |
|------------|-----------|----------|---------|
| 9310-10ML  | Syringe   | 10 mL    | 11.4 g  |
| 9310-300ML | Cartridge | 300 mL   | 344 g   |

## Contact Information

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## Cured Properties

|  |   |
|--|---|
| Breakdown Voltage                              | 41 600 V                                    |
| Dielectric Strength                            | 220 V/mil                                   |
| Resistivity                                    | $9.3 \times 10^{12} \Omega \cdot \text{cm}$ |
| Hardness                                       | 84 D  |
| Tensile Strength                               | 9.4 N/mm <sup>2</sup>                       |
| Compressive Strength                           | 103 N/mm <sup>2</sup>                       |
| Lap Shear (stainless steel)                    | 8.5 N/mm <sup>2</sup>                       |
| (aluminum)                                     | 6.2 N/mm <sup>2</sup>                       |
| Glass Transition Temperature (T <sub>g</sub> ) | 113 °C                                      |
| CTE Prior T <sub>g</sub>                       | 56 ppm/°C                                   |
| CTE After T <sub>g</sub>                       | 185 ppm/°C                                  |
| Thermal Conductivity @ 25 °C                   | 0.2 W/(m·K)                                 |
| Service Temperature Range                      | -55–140 °C                                  |

## Usage Parameters

|              |           |
|--------------|-----------|
| Working Time | Unlimited |
|--------------|-----------|

## Uncured Properties

|                   |           |
|-------------------|-----------|
| Density           | 1.15 g/mL |
| Viscosity @ 25 °C | 87 Pa·s   |
| Shelf Life        | 2 y       |

## Application Instructions

Read the product SDS and Application Guide for more detailed instructions before using this product (downloadable at [www.mgchemicals.com](http://www.mgchemicals.com)).

## Recommended Preparation

Clean the substrate with Isopropyl Alcohol, MG #824, so the surface is free of oils, dust, and other residues.

## Syringe or Cartridge

1. For 10 mL size, twist and remove the cap from the syringe. Do not discard the cap.
2. For the 300 mL size, cut the end of the cartridge tip.
  - a. Screw the tip on the cartridge.
  - b. Insert the cartridge in a caulking gun.
3. Dispense the adhesive evenly to both surfaces.
4. To stop the flow, pull back on the plunger.
5. Clean nozzle to prevent contamination and material buildup.
6. Replace the cap on the cartridge or syringe.

## Dispensing Accessories

9310-300ML cartridges are compatible with caulking guns that are readily available for purchase at local hardware stores.

## Cure Instructions

The product will not cure at room temperature. Cure the adhesive in an oven at one of these time/temperature options:

|                    |        |        |
|--------------------|--------|--------|
| <b>Temperature</b> | 100 °C | 120 °C |
| <b>Time</b>        | 30 min | 10 min |

## Storage and Handling

Store between -10 and 27 °C in a dry area, away from sunlight (see SDS). To maximize shelf life, recap product firmly when not in use.

## Disclaimer

This information is believed to be accurate. It is intended for professional end-users who have the skills required to evaluate and use the data properly. M.G. Chemicals Ltd. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.