# 8330S



## **Silver Conductive Epoxy Adhesive**

8330S is an electrically conductive, silver-filled 2-part epoxy adhesive with a long working time. It is smooth, non-sagging, thixotropic, and bonds well to a wide variety of substrates.

It can be used as a solder replacement for bonding heat-sensitive electronic components, or for making conductive connections where soldering is not an option, such as when bonding to glass, soft metals, or plastics.

8330S is highly filled to maximize electrical conductivity. For a more economical version, use 8331S. For a shorter working time and room temperature cure, use 8330.

### **Features and Benefits**

- Creates strong permanent electrical connections
- Extended working time
- Low cure temperature of 65 °C
- Room temperature storage
- Long shelf life
- NASA low outgassing approved

#### **Available Packaging**

Cat. No.	Packaging	Net Vol.	Net Wt.
8330S-21G	2 Syringe kit	6 mL	18.7 g
8330S-50ML	2 Jar kit	50 mL	156 g
8330S-200ML	2 Can kit	200 mL	625 g

### **Contact Information**

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### **Cured Properties**

Resistivity	7.0 x 10 <sup>-4</sup>	Ω·cm
Hardness	73	D
Tensile Strength	9.0	N/mm <sup>2</sup>
Compressive Strength	36	N/mm <sup>2</sup>
Lap Shear (stainless steel)	1.7	N/mm <sup>2</sup>
(aluminum)	1.2	N/mm <sup>2</sup>
Water Absorption	0.3	%
Outgassing @ 125 °C for 24 h	0.4	%
Glass Transition Temperature (Tg)	34	°C
CTE Prior T <sub>g</sub>	97 ppm	/°C
CTE After T <sub>g</sub>	208 ppm	/°C
Thermal Conductivity @ 25 °C	2.4	W/(m⋅K)
Service Temperature Range	-40–150	°C

### **Usage Parameters**

Working Time	4 h
Mix Ratio by Volume	1:1
Mix Ratio by Weight	1.1:1

### **Uncured Properties**

Mixed Density		3.06 g/mL
Shelf Life		3 y
Viscosity @ 25 °C	(A)	3 000 Pa·s
	(B)	8 600 Pa·s

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### **Application Instructions**

Read the product SDS before using this product (downloadable at 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

- **1.** Twist and remove the cap from the syringe. Do not discard cap.
- **2.** Measure 1 part by volume of A.
- 3. Measure 1 part by volume of B.
- **4.** Dispense material on a mixing surface or container, and thoroughly mix parts A and B together.
- 5. To stop the flow, pull back on the plunger.
- **6.** Clean nozzle to prevent contamination and material buildup.
- 7. Replace the cap on the syringe.

#### **Can or Jar**

- **1.** Stir each part individually to re-incorporate material that may have separated.
- 2. Measure 1.1 part by weight of A.
- 3. Measure 1 part by weight of B.
- 4. Thoroughly mix parts A and B together.
- **5.** Apply adhesive to the application area.

### **Cure Instructions**

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

- 2 h @ 65 °C
- 1 h @ 80 °C
- 30 min @ 100 °C

### **Storage and Handling**

Store between 16 and 27  $^\circ C$  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.