8331D

Silver Conductive Epoxy Adhesive

8331D is an electrically conductive, silver-filled 2-part epoxy adhesive. It is smooth, non-sagging, thixotropic, and bonds well to a wide variety of substrates.

This product allows for quick, cold-soldering repairs. It can also 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.

8331D has been formulated to be economical. For a higher fill that maximizes conductivity, use 8330D. For a longer working time, time, use 8331S.



Features and Benefits

- Creates strong permanent electrical connections
- Cures at room temperature
- SVHC free
- Excellent adhesion to many substrates
- Room temperature storage
- Long shelf life

Available Packaging

Cat. No.	Packaging	Net Vol.	Net Wt.
8331D-14G	2 Syringe kit	6 mL	14.4 g
8331D-120G	2 Jar kit	50 mL	120 g

Contact Information

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Cured Properties

Resistivity	1.8 x 10^{-3}	Ω·cm
Hardness	78	D
Tensile Strength	13	N/mm²
Compressive Strength	69	N/mm²
Lap Shear (stainless steel)	5.6	N/mm²
(aluminum)	5.1	N/mm²
Glass Transition Temperature (T_g)	35	˚C
CTE Prior T_g	58	ppm/˚C
CTE After T_g	234	ppm/˚C
Thermal Conductivity @ 25 ˚C	1.5	W/(m·K)
Service Temperature Range	-50–150	˚C

Usage Parameters

Working Time	20 min
Service Cure	65 min @ 22 ˚C
Mix Ratio by Volume	1:1
Mix Ratio by Weight	1.1:1

Uncured Properties

Mixed Density		2.40	g/mL
Shelf Life		3	y
Viscosity @ 25 ˚C	(A)	130	Pa·s
	(B)	130	Pa·s

Application Instructions

Read the product SDS and Application Guide for more detailed instructions 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

Allow to cure at room temperature for 6 hours, or cure the adhesive in an oven at one of these time/temperature options:

- 10 min @ 65 ˚C
- 5 min @ 80 ˚C

Storage and Handling

Store between 16 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.