# 8329TFS



## **Thermally Conductive Adhesive**

8329TFS is a 2-part, heat-cure, thermally conductive epoxy adhesive with a 4-hour working time. It is a dark grey, smooth, thixotropic paste that cures to form a hard, durable polymer that is thermally conductive, yet electrically insulating.

This thermally conductive adhesive is used to glue heatsinks to LED's, CPU's, and other heat-generating components.

This product cures slowly. For a faster cure version, use 8329TFF or 8349TFM.

### **Features & Benefits**

- · High thermal conductivity
- · Long working time
- · Provides strong electrical insulation
- Bonds well to a wide variety of substances
- Strong resistance to humidity, salt water, mild bases, and aliphatic hydrocarbons

### **Available Packaging**

Cat. No.	Packaging	Net Vol.	Net Wt.
8329TFS-25ML	Dual Syringe	25 mL	52.2 g
8329TFS-50ML	Dual Cartridge	45 mL	94 g

### **Contact Information**

MG Chemicals, 1210 Corporate Drive Burlington, Ontario, Canada L7L 5R6

Email: support@mgchemicals.com

Phone: North America: +(1)800-340-0772

International: +(1) 905-331-1396 Europe: +(44)1663 362888



### **Cured Properties**

Resistivity	$1.0 \times 10^{12} \Omega \cdot cm$
Hardness	68 D
Tensile Strength	4.2 N/mm <sup>2</sup>
Compressive Strength	42 N/mm <sup>2</sup>
Lap Shear (stainless steel)	5.0 N/mm <sup>2</sup>
(aluminum)	6.3 N/mm <sup>2</sup>
Glass Transition Temperature (T <sub>g</sub> )	9 °C
CTE Prior T <sub>g</sub>	47 ppm/°C
CTE After T <sub>g</sub>	164 ppm/°C
Thermal Conductivity @ 25 °C	1.2 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	1:0.96

### **Uncured Properties**

Mixed Density		2.11 g/mL
Viscosity @ 25 °C	(A)	N/A
	(B)	700 Pa·s
Shelf Life		>3 v

# 8329TFS



### **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 or Cartridge**

- **1.** Twist and remove the cap from the syringe or cartridge. Do not discard cap.
- **2.** Dispense a small amount to ensure even flow of both parts. A manual or pneumatic dispensing gun is required for a 50 mL cartridge.
- 3. (Optional) Attach a static mixer.
  - **a.** Dispense and discard 3 to 5 mL of the product to ensure a homogeneous mixture.
  - **b.** After use, dispose of static mixer.
- **4.** Without a static mixer, 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.** Re-place the cap on the cartridge or syringe.

### **Dispensing Accessories**

Consult the table below for accessory selection. See the Dispensing Accessories Application Guide for usage instructions. 8MT-50-FT should only be used with a pneumatic dispenser.

Cat. No.	<b>Dispensing Gun</b>	Static Mixer
8329TFS-25ML	N/A	N/A
8329TFS-50ML	8DG-50-1-1	8MT-50, 8MT-50-FT

#### **Cure Instructions**

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

Temperature	65 °C	80 °C	100 °C
Time	3 hours	80 minutes	30 minutes

#### **Storage and Handling**

Store between 16 and 27  $^{\circ}\text{C}$  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.