

# 8349TFM



## Thermal Adhesive

8349TFM is a 2-part, flame retardant, thermally conductive epoxy adhesives. It is a dark grey, smooth, thixotropic paste that cures to form a hard, durable polymer that is thermally conductive, yet electrically insulating.

This thermal adhesive is most often used to bond heatsinks to CPUs, LEDs and other electronics components.

For a shorter working time, use 8329TFF. For a longer working time, use 8329TFS.



## Features and Benefits

- High thermal conductivity
- Flame retardant – meet UL 94V-0
- 1:1 mix ratio
- Provides strong electrical insulation
- Excellent compressive and tensile strength
- Bonds well to a wide variety of substances
- Strong resistance to humidity, salt water, mild bases, and aliphatic hydrocarbons
- SVHC-free

## Available Packaging

Cat. No.	Packaging	Net Vol.	Net Wt.
8349TFM-25ML	Dual Syringe	25 mL	44.6 g
8349TFM-50ML	Dual Cartridge	46 mL	82.0 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	1.2 x 10 <sup>12</sup> Ω·cm
Hardness	88 D
Tensile Strength	29 N/mm <sup>2</sup>
Compressive Strength	125 N/mm <sup>2</sup>
Lap Shear (stainless steel)	6.4 N/mm <sup>2</sup>
(aluminum)	4.0 N/mm <sup>2</sup>
Glass Transition Temperature (T <sub>g</sub> )	39 °C
CTE Prior T <sub>g</sub>	32 ppm/°C
CTE After T <sub>g</sub>	155 ppm/°C
Thermal Conductivity @ 25 °C	1.1 W/(m·K)
Service Temperature Range	-50–165 °C

## Usage Parameters

Working Time	20 min
Service Cure	90 min @ 22 °C
Mix Ratio by Volume	1:1
Mix Ratio by Weight	1:1

## Uncured Properties

Mixed Density	1.74 g/mL
Shelf Life	3 y
Viscosity @ 25 °C	(A) 1 400 Pa·s
	(B) 143 Pa·s

## 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. 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 syringe or cartridge.

## Dispensing Accessories

Consult the table below for accessory selection. See the Dispensing Accessories Application Guide for usage instructions.

Cat. No.	Dispensing Gun	Static Mixer
8349TFM-25ML	N/A	N/A
8349TFM-50ML	8DG-50-1-1	8MT-50

## Cure Instructions

Allow to cure at room temperature for 16 hours, or cure the adhesive in an oven at one of these time/temperature options:

<b>Temperature</b>	65 °C	80 °C
<b>Time</b>	20 minutes	10 minutes

## 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.