

8329TFF



Fast Cure Thermal Glue

8329TFF is a 2-part, flame retardant, thermally conductive epoxy adhesive with a 5-minute working time. It is an off white, smooth, thixotropic paste that cures to form a hard, durable polymer that is thermally conductive, yet electrically insulating.

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

This product has a very short working time. For a longer working time, use 8349TFM or 8329TFS.

Features & Benefits

High thermal conductivity

Flame retardant—UL 94V-0 registered (File # E334302)

1:1 mix ratio

Provides strong electrical insulation

Low CTE prior T_g

High tensile and compressive strength

Bonds well to a wide variety of substances

Strong resistance to humidity, salt water, mild bases, and aliphatic hydrocarbons

Cure Instructions

Allow to cure at room temperature for 4 hours, or cure the adhesive in an oven at one of these time/temperature options:

| | | |
|-------------|--------|--------|
| Temperature | 65 °C | 80 °C |
| Time | 15 min | 10 min |

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.



Available Packaging

| Part # | Packaging | Net Vol. | Net Wt. |
|--------------|----------------|----------|---------|
| 8329TFF-25ML | Dual Syringe | 25 mL | 40.1 g |
| 8329TFF-50ML | Dual Cartridge | 45 mL | 72.3 g |

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.

| Part # | Dispensing Gun | Static Mixer |
|--------------|----------------|-------------------|
| 8329TFF-25ML | N/A | N/A |
| 8329TFF-50ML | 8DG-50-1-1 | 8MT-50, 8MT-50-FT |

Liquid Properties

| | | |
|-------------------|--|---|
| Density | 1.6 g/mL (Mixed) 1.7 g/mL (A) 1.5 g/mL (B) | ASTM D1475 |
| Viscosity @ 25 °C | 72 Pa·s (A) 110 Pa·s (B) | Brookfield Engineering labs Inc. IPCTM-65- Method 2.4.24.4 |
| Mix Ratio | 1:1 (Volume) 1:0.9 (Weight) | — |
| Working Time | 5 min | — |
| Shelf Life | 3 y | — |

Cured Properties

| | | |
|--|---|----------------------|
| Color | Beige | — |
| Density | 1.6 g/mL | Hydrostatic Weighing |
| Service Temperature Range | -40–150 °C | — |
| Resistivity | $7.9 \times 10^{12} \Omega \cdot \text{cm}$ | ASTM D257 |
| Hardness | 82 D | ASTM D2240 |
| Tensile Strength | 13 N/mm ² | ASTM D638 |
| Compressive Strength | 65 N/mm ² | ASTM D695 |
| Lap Shear | 7.1 N/mm ² (Stainless steel) 8.3 N/mm ² (Aluminum) | ASTM D1002 |
| Glass Transition Temperature (T_g) | 25 °C | ASTM E1545 |
| Coefficient of Thermal Expansion (CTE) | 34 ppm/°C (Prior T_g) 146 ppm/°C (After T_g) | ASTM E831 |
| Thermal Conductivity @ 25 °C | 0.8 W/(m·K) | ASTM E1461 |
| Specific Heat Capacity @ 25 °C | 1.4 J/(g·K) | |
| Thermal Diffusivity @ 25 °C | 0.3 mm ² /s | |
| Weight Loss @ 155 °C (600 hrs) | 2.6 % | — |

Application Instructions

Read the product SDS for more detailed instructions before using this product.

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. If nozzle is blocked, clean any hardened material on both the inside and outside using a needle and paper towel.
3. Dispense a small amount to ensure even flow of both parts. A manual or pneumatic dispensing gun is required for a 50 mL cartridge.
4. (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.
5. Without a static mixer, dispense material on a mixing surface or container, and thoroughly mix parts A and B together.
6. To stop the flow, pull back on the plunger.
7. Clean nozzle to prevent contamination and material buildup.
8. Re-place the cap on the cartridge or syringe or cartridge.

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.