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 Tg

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 4 and 10 ˚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

8329TFF

Liquid Properties

Density	1.6 g/mL (Mixed) 1.7 g/mL (A) 1.5 g/mL (B)	ASTM D1475
Viscosity @ 25 ˚C	72 000 cP (A) 110 000 cP (B)	Brookfield Engineering labs Inc. IPCTM-65- Method 2.4.24.4
Mix Ratio	1:1 (Volume) 1:0.9 (Weight)	—
Working Time [a]	5 min	—
Peak Exotherm [b]	59 °C	ASTM D2471
Shelf Life	3 y	—

[a] Ambient temperature of 22 °C
[b] Based on a 20 mL sample in a fixed container geometry

Cured Properties

Color	Beige	—
Density	1.6 g/mL	Hydrostatic Weighing
Service Temperature Range	-40–150 ˚C	—
Resistivity	7.9 x 10^{12} Ω·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 Specfic Heat Capacity @ 25 ˚C Thermal Diffusivity @ 25 ˚C	0.8 W/(m·K) 1.4 J/(g·K) 0.3 mm^2/s	ASTM E1461
Weight Loss @ 155 °C (600 hrs)	2.6 %	–

8329TFF

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.