9460TC

Thermally Conductive 1-Part Epoxy Adhesive

9460TC is a 1-part, heat cured only, thermally conductive epoxy adhesive with an ulimited 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 1-part adhesive is used to glue heat sinks to LEDs, CPUs and other heat-generating components. It does not require mixing and is suitable for use with manual, pneumatic, and automatic dispensing systems.

Features & Benefits

High thermal conductivity

No mixing required prior to use

Provides strong electrical insulation

Low cure temperature (<100 °C)

Room temperature storage (≤22 °C)

Bonds well to a wide variety of substances

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

Cure Instructions

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

Temperature	80 °C	100 °C	120 °C
Time	2 h	1 h	30 min

Available Packaging

Part #	Packaging	Net Vol.	Net Wt.
9460TC-3ML	Syringe	3 mL	4.90 g

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.

9460TC-3ML

Temperature	22 °C	4 °C	-10 °C
Shelf Life	6 months	10 months	14 months

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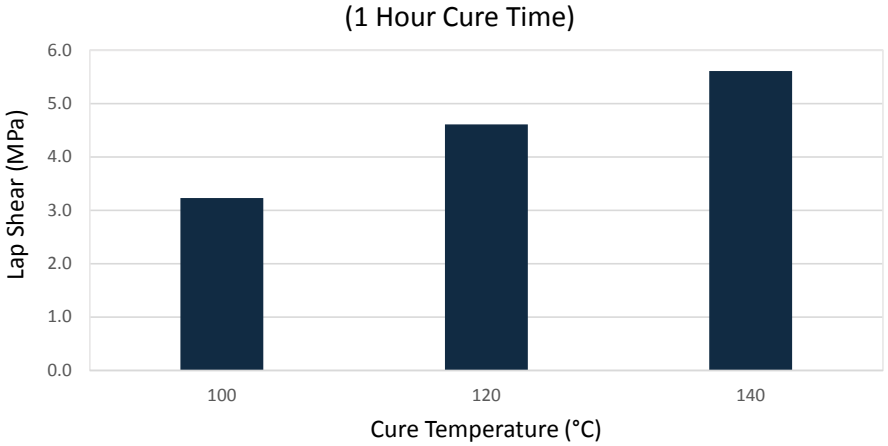
Liquid Properties

Density	1.6 g/mL	ASTM D1475
Working Time	Unlimited	—

Cured Properties

Color	Off-white	—
Density	1.5 g/mL	Hydrostatic Weighing
Service Temperature Range	-65–150 ˚C	—
Resistivity	7.4 x 10^{16} Ω·cm	ASTM D257
Hardness	86 D	ASTM D2240
Tensile Strength	9.1 N/mm^2	ASTM D638
Compressive Strength	78 N/mm^2	ASTM D695
Lap Shear	6.0 N/mm^2 (Stainless steel) 3.2 N/mm^2 (Aluminum)	ASTM D1002
Glass Transition Temperature (T_g)	106 ˚C	ASTM E1545
Coefficient of Thermal Expansion (CTE)	36 ppm/˚C (Prior T_g) 72 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) 1.2 J/(g·K) 0.5 mm^2/s	ASTM E1461
Weight Loss @ 155 °C (600 hrs)	1.3 %	–

Lap Shear vs. Cure Temperature



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

1. Twist and remove the cap from the syringe. Do not discard cap.
2. Dispense the adhesive evenly to both surfaces.
3. To stop the flow, pull back on the plunger.
4. Clean nozzle to prevent contamination and material buildup.
5. Re-place the cap on the cartridge or syringe.