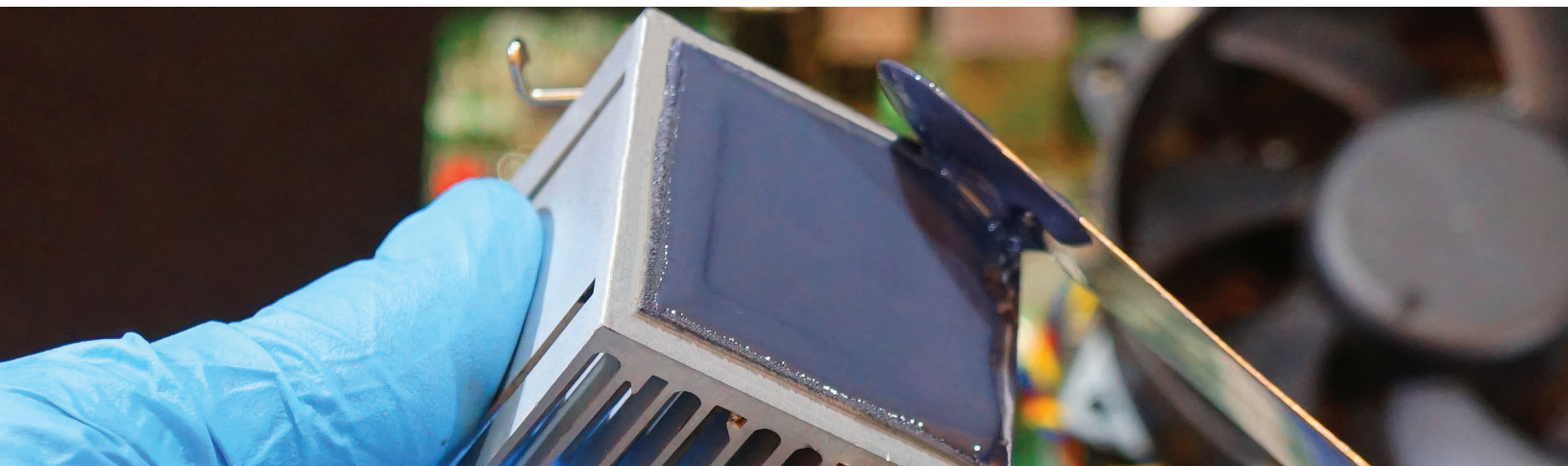


Thermally Conductive Adhesives — 2-Part Epoxy



Thermally conductive epoxy for the assembly and repair of electronics

Features and Benefits:

- Excellent thermal conductivity
- Electrically insulating
- 1:1 mix ratio
- Good adhesion to most electronic substrates
- Fast cure versions meet UL 94V-0
- Room temperature storage and long shelf life

Applications:

- Attaching heat sinks
- Bonding LED's
- Bonding heat generating devices in electronic assemblies
- Creating thermal connections between devices and external cases

Dispensing gun and tips available for flowable versions.



We offer a choice of six Thermally Conductive Adhesives:

Choose a working time:

- 4 minutes: Good when rapid curing is required at ambient temperature
- 45 minutes: Good when a moderate working time and rapid curing is required at elevated temperature
- 4 hours: Good when long working time is required for assembly operations

And then a viscosity:

- Flowable: Can be dispensed automatically and through a mix tip
- Paste: Thixotropic paste providing highest thermal conductivity

To select the part number suited to your application:

Viscosity		Working Time	
	4 Minutes	45 Minutes	4 Hours
Flowable	8329TFF	8329TFM	8329TFS
Paste	8329TCF	8329TCM	8329TCS

Thermally Conductive Adhesives Comparison Chart

Cat. Number	8329TCS	8329TFS	8329TCM	8329TFM	8329TCF	8329TFF
Uncured Working Properties						
Mix Ratio by Volume (A:B)	1:1	1:1	1:1	1:1	1:1	1:1
Viscosity	Paste	Flowable	Paste	Flowable	Paste	Flowable
Working Time	4 h	4 h	45 min	45 min	4 min	4 min
Full Cure @22 °C [72 °F]	96 h	96 h	24 h	24 h	3 h	2 h
Full Cure @65 °C [149 °F]	1 h ^{a)}	4 h	1 h	150 min	15 min	10 min
Meets UL 94-V0	No	No	No	No	Yes	Yes
Cured Properties						
Color	Dark Grey	Dark Grey	Dark Grey	Black	Off White	Off White
Density	2.27 g/mL	2.07 g/mL	2.47 g/mL	2.19 g/mL	1.73 g/mL	1.46 g/mL
Hardness	62D	68D	76-77D	72D	82D	83D
Mechanical Properties						
Tensile Strength	11.4 N/mm ²	4.2 N/mm ²	10 N/mm ²	4.5 N/mm ²	12.8 N/mm ²	12.8 N/mm ²
Compressive Strength	43 N/mm ²	42 N/mm ²	34 N/mm ²	44 N/mm ²	36 N/mm ²	67 N/mm ²
Lap Shear Strength (Aluminum)	7.7 N/mm ²	6.3 N/mm ²	8.2 N/mm ²	6.6 N/mm ²	8.2 N/mm ²	TBD
Electrical Properties						
Volume Resistivity	2 x 10 ¹³ Ω·cm	1 x 10 ¹³ Ω·cm	9 x 10 ¹² Ω·cm	9 x 10 ¹² Ω·cm	3 x 10 ¹³ Ω·cm	7 x 10 ¹² Ω·cm
Breakdown Voltage	26.3 kV	19.8 kV	29.0 kV	16.5 kV	35.3 kV	48.9 kV
Dielectric Strength	6.6 kV/mm	8.5 kV/mm	6.5 kV/mm	7.3 kV/mm	16.2 kV/mm	15.4 kV/mm
Thermal Properties						
Thermal Conductivity @25 °C [77 °F]	1.44 W/(m·K)	1.22 W/(m·K)	1.36 W/(m·K)	1.14 W/(m·K)	1.02 W/(m·K)	0.63 W/(m·K)
Thermal Diffusivity @25 °C [77 °F]	0.72 mm ² /s	0.58 mm ² /s	0.61 mm ² /s	0.49 mm ² /s	0.44 mm ² /s	0.26 mm ² /s
Specific Heat @25 °C [77 °F]	0.92 J/(g·K)	1.01 J/(g·K)	0.91 J/(g·K)	1.06 J/(g·K)	1.32 J/(g·K)	1.62 J/(g·K)
Glass Transition Temperature (T _g)	20 °C	9 °C	46 °C	76 °C	88 °C	67 °C
CTE prior T _g	53 ppm/°C	64 ppm/°C	71 ppm/°C	67 ppm/°C	23 ppm/°C	50 ppm/°C
CTE after T _g	137 ppm/°C	159 ppm/°C	131 ppm/°C	125 ppm/°C	107 ppm/°C	143 ppm/°C

a) Full Cure @80 °C [176 °F]

Available Packaging



6 mL Syringes
8329TCM-6ML
8329TCS-6ML



25 mL Dual Syringe
8329TFM-25ML
8329TFS-25ML



50 mL Dual Cartridge
8329TCF-50ML
8329TFF-50ML
8329TFM-50ML
8329TFS-50ML



50 mL Kit
8329TCM-50ML
8329TCS-50ML



200 mL Kit
8329TCM-200ML
8329TCS-200ML

