

50-3122

ONE COMPONENT THERMALLY CONDUCTIVE & ELECTRICALLY INSULATING EPOXY ADHESIVE

DESCRIPTION:

50-3122 is a one component epoxy adhesive with a unique combination of physical properties. This adhesive provides both high shear and high peel strengths and is also able to maintain exceptionally strong bonds over a wide temperature range of -60 to +205°C.

50-3122 is formulated to offer superior resistance to impact, thermal shock, vibration and stress fatigue cracking. This product does not contain solvents and is therefore a 100% solids system.

50-3122 **passes NASA's outgassing requirements** per ASTM E595-07.

50-3122 is both a thermally conductive and electrically insulating epoxy adhesive. It is suitable for electronic, electrical, aerospace, appliance, automotive and industrial applications.

FEATURES:

- High Thermal Conductivity
- Electrically Insulating
- Good Chemical Resistance
- Superior Impact & Thermal Shock Resistance
- One Component; No Mixing Required

TYPICAL PROPERTIES:

Viscosity, cps, 25 °C	165,000
Available Colors	Black, Gray, Red
Hardness, Shore D	90
Operating Temperature, °C	-60 to +205
Specific Gravity, 25 °C	1.82
Compressive Strength, psi	16,000
Tensile Lap Shear, psi	2,100
Tensile Modulus, psi	675,000
Tensile Strength, psi	9,500
T-Peel, Al to Al, pli	30
Dielectric Strength, V/mil	370
Volume Resistivity, ohm-cm, 25°C	10 ¹³
Coefficient of Thermal Expansion, ppm/°C	143

Thermal Conductivity, W/m·°K	1.44
Glass Transition Temperature, °C	112
Outgassing	
%TML	0.43
%CVCM	0.02

INSTRUCTIONS FOR USE:

Cure according to one of the following recommended cure schedules:

- | | |
|-----------|------------|
| a) 100 °C | 2 Hours |
| b) 125 °C | 1 Hours |
| c) 160 °C | 10 Minutes |
| d) 175 °C | 5 Minutes |

PREPARATION OF SURFACES:

Surfaces to be bonded must be clean and grease free. Adhesion can be substantially increased by abrading the surface with a material like emery cloth or sandpaper. A roughened porous surface will produce the best results. Any oxidized metal films should be removed just prior to application of the adhesives.

STORAGE & HANDLING:

The shelf life at 25°C is 6 months in original unopened containers.
The expected shelf life at 0 °C is 1 year.

We recommend refrigerating these adhesives during storage. Extreme warm temperatures during shipping may reduce shelf life. Dry ice or refrigerated shipping is optional and may be requested at the time of order.

Please read the Safety Data Sheet before using this or any other chemical.

AVAILABILITY:

50-3122R is available in syringes, quarts, gallons and five-gallon pails.

IMPORTANT:

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