

50-3122

ONE COMPONENT THERMALLY CONDUCTIVE & ELECTRICALLY INSULATING EPOXY ADHESIVE

DESCRIPTION:

50-3122 is a one component (no mixing is necessary) epoxy adhesive with a unique combination of physical properties. This adhesive provides both high shear and high peel strengths. It 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 SPECIFICATIONS:

| | |
|-----------------------------------|------------------|
| Viscosity, @25 °C | 165,000 |
| Color | Gray |
| Solids Content, % | 100 |
| Specific Gravity, @25 °C | 1.82 |
| Hardness, Shore D | 90 |
| Operating Temperature, °C | -60 to +205 |
| Tensile Strength, psi | 9,500 |
| Tensile Modulus, psi | 675,000 |
| Tensile Lap Shear, psi | 2,100 |
| T-Peel, Al to Al, pli | 30 |
| Compressive Strength, psi | 16,000 |
| Volume Resistivity, ohm-cm, 25 °C | 10 ¹³ |



TYPICAL SPECIFICATIONS (continued):

| | |
|--------------------------------|------|
| Dielectric Strength, Volts/mil | 370 |
| Thermal Conductivity, W/m- °K | 1.44 |
| Outgassing (with Cat. 190) | |
| %TML | .43 |
| %CVCM | .02 |

CURE SCHEDULE:

| | | |
|--------|---------|------------|
| 100 °C | (212°F) | 2 Hours |
| 125 °C | (257°F) | 1 Hours |
| 160 °C | (320°F) | 10 Minutes |
| 175 °C | (347°F) | 5 Minutes |

SHELF LIFE:

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.

AVAILABILITY:

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

IMPORTANT:

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