EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

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}

epoxies.com
21 Starline Way
Cranston, RI 02921 USA
t 401.946.5564
f 401.946.5526

TYPICAL SPECIFICATIONS (continued):

Dielectric Strength, Volts/mil	370
Thermal Conductivity, W/m- °K	1.44
Outgassing	
%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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09/14

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