

813-76

Thermally Conductive and Electrically Insulating Adhesive

Description:

813-76 is a room temperature curing thermally conductive and electrically insulating adhesive. **813-76** is designed for assembling heat sensitive components onto printed circuit boards. It is recommended for any application requiring strong adhesive bonds and excellent thermal transfer.

Advantages and Applications:

813-76 provides strong and high impact bonds that improve heat transfer while maintaining electrical insulation. It bonds to a wide range of substrates including metals, glass and plastics. **813-76** has a low coefficient of thermal expansion and provides excellent resistance to mismatched substrates and very low shrinkage.

Additionally, **813-76** is highly resistant to chemicals. **813-76** meets the requirements of NASA out gassing testing (ASTM E-595).

Shelf Life: (Sealed containers)

One Year @ 25°C (both A+B). We recommend hand agitation of each component after long standing to insure best results. Combine the Resin and the Hardener in the ratio listed below. Mix by hand or mechanical mixer until material is uniform in appearance and blue in color.

For additional information or assistance, please call **978-439-9841**

813-76 features the following characteristics that enable ease of use.

Properties:

	<u>Typical Value</u>
Hardness Shore D:	90
Color (Mixed):	Blue
Mixed Viscosity (cP):	40,000
Specific Gravity:	2.30
Mix Ratio by Weight: (Resin / Hardener)	100 / 9.5
Operating Temperature:	-70 to +125°C
Thermal Conductivity, (W/M/°K)	0.96
CTE, (in/in/°C):	25 E-06
Lap Shear, Alum to Alum, (psi):	3000
Pot Life, (minutes):	40
NASA Out gassing (ASTM E-595) cured 3 hours @ 80°C	
TML	0.54%
CVCM	0.01%
WVR (Water Vapor Regain)	0.09%

Cure Schedule:

Cure Temperature:	25°C	65°C
Cure Time (hours):	24	2 - 4

Storage and Handling:

Normal storage and handling is at room temperature. Use standard mixing and housekeeping procedures to minimize the risk of spills and contact with the surrounding materials.

All values reported above are typical values, and are reported as a means of reference. Individual testing should be done to determine actual results, tested at specific conditions.