

## 813-04

### A One Component Semi-Flexible Epoxy Encapsulant

#### **Description:**

*813-04* is a one component, high performance, semi-flexible, heat cured, epoxy encapsulant system. *813-04* has excellent heat resistance and electrical properties.

#### **Advantages:**

*813-04* features low viscosity and excellent wetting properties to ensure complete impregnation and high lap shear bond strength to produce high performance parts. *813-04* cures to a semi-flexible state to yield a high degree of thermal shock resistance.

#### **Physical Properties:**

##### **Resin**

	813-04
Color:	Brown
Specific Gravity:	1.07
Viscosity (cps):	2,200

#### **Shelf Life:** (Sealed containers)

Frozen storage is recommended for optimum shelf life. Hand agitation is recommended after long standing to ensure homogeneous mixture.

Storage Guide: 1 year at -40°C  
6 months at 0°C  
4 months at 25°C

#### **Instructions:**

Mix by hand or mechanical mixer until material is uniform in appearance.

#### **Cure Schedule**

**Post cure for 2 hours @ 150°C for optimum properties.**

#### **Cure Schedule # 1**

Cure Temp:	95°C	105°C	120°C
Cure Time (hrs.):	6 - 8	3 - 5	2 - 3

#### **OR**

#### **Cure Schedule # 2:**

Plus Or

Cure Temp:	135°C	150°C	175°C
Cure Time (hrs.):	2	1-2	1

Shore Hardness, measured @ 25°C: >60A  
Glass Transition Temperature, (°C): 30  
Thermal Conductivity (W/mK) 0.20  
Operating Temperature Range, (°C): -20°C to +175°C

#### **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.

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