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ER3103 Two Part Epoxy Adhesive / Encapsulant For Rapid Heat Transfer

ER3103 is a two-component, room temperature/heat cure epoxy adhesive and encapsulation compound characterized by slow cure rate and thermal conductivity. Because of its slow reactivity at room temperature, **ER3103** may be used in hand mix as well as meter mix applications. For best properties it is recommended to heat cure for 1 hour at 95°C plus 2 hours at 150°C.

Typical Technical Data:

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| Part A: Color: | Grey Liquid |
| Viscosity: | 110,000 cps |
| Specific Gravity: | 2.20 |
| Part B: Color: | Clear Liquid |
| Viscosity: | <1,000 cps |
| Specific Gravity: | 0.95 |
| Mixed: Color: | Grey liquid |
| Viscosity: | 6,400 cps |
| Specific Gravity: | 2.06 |
| Mix Ratio: By Weight: | 100.0 A : 8.0 B |
| Gel time at 72°F: | 185 minutes in 100 gr. Mass |
| Maximum exotherm at 100 grams: | 94°C |
| Time to maximum exotherm in 100 gram mass: | 190 min. |
| Cured Hardness: | 85D |
| Glass Transition Temperature [Tg]: | 127°C |
| Tensile Strength: | 1772 psi with post cure |
| Shrinkage: | 0.08% |
| CTE: | 29.1 x 10 ⁻⁶ unit/unit/°C |
| Volume Resistivity: | 2.7x10 ¹⁶ Ohms/cm ³ |
| Dielectric Strength: | 373 Volts/mil |
| Thermal Conductivity: | 1.41 BTU Foot/Hour/Ft ² /°F 2.45 Watts/Meter/°K 0.005 cal/sec/cm/°C |

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