



FORMULATING • INNOVATIVE • SOLUTIONS

ER2112

Single Part Heat Cure Encapsulation Epoxy

DESCRIPTION

ER2112 is a single part, heat cured epoxy resin intended for use as a 'drizzle' coating and impregnation of motor armatures and stators in harsh environments. **ER2112** has a low thermal coefficient of expansion to accommodate the different expansion rates of the steel and copper elements found in motor armatures and stators. **ER2112** maintains a modest thixotropic index at common storage temperatures to aid in the buoyancy of fillers, yet the viscosity drops dramatically when the product is cast over heated armatures and stators to aid in the total encapsulation of the end product. **ER2112** has a low reaction temperature to assist in fast process times and to lower the total heat requirement of curing the product.

TYPICAL PROPERTIES

Part A: Color:	Tan to Brown
Specific Gravity:	1.2 g/cc
Viscosity:	~15,000cps at 23°C
DSC ² Reactivity data:	
Reaction Onset Temp	139°C
Max. Reaction Temp:	166°C
Glass Transition [Tg]:	110°C
Preheat Temperature of Part:	100 °C
Typical Cure Schedule:	25 min 150 °C

PERFORMANCE PROPERTIES

Cured Hardness: Shore D	90+ typ.
Lap Shear Strength:	
Steel to Steel:	1,600 psi
Aluminum to Aluminum:	600 psi
Linear Shrinkage:	1.276%
Volume Resistivity:	1.148x10 ¹⁶ Ohm cm
Surface Resistivity:	3.76x10 ¹⁵ Ohm
Coefficient of Thermal Expansion [CTE]:	4.71x10 ⁻⁷ u/u/°C
Tensile Strength:	4657.9 psi
Tensile Modulus:	306,000 psi
Elongation:	6.5%

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