

# 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.

Data contained herein are believed to be reliable. Fit-for-use testing should be conducted by each user.

TYPICAL PROPERTIES	TEST METHOD	VALUE
Cure Time (minutes):		
150 °C:		25
Preheat Temperature of Part (°C):		100
Shore D Hardness:	ASTM D2240	90
Lap Shear (psi):	ASTM D1002	
[CRS to CRS]:		1600
[Al to Al]:		600
Tensile Strength (psi):	ASTM D638	4658
Tensile Modulus (psi):		30,000
Elongation (%):		6.5
Coefficient of Thermal Expansion (unit/unit/ °C):		4.71x10 <sup>-7</sup>
Linear Shrinkage (%):		1.276
Volume Resistivity (Ohm cm):		1.148x10 <sup>16</sup>
Surface Resistivity (Ohm):		3.76x10 <sup>15</sup>
Tg (°C):	ASTM D3418	110
Reaction Onset Temperature (°C):		139
Max. Reaction Temperature (°C):		166
Specific Gravity (g/cc):	ASTM D1475	1.2
Viscosity (cps):	ASTM D2393	15,000
Color:		Tan to Brown
Shelf Life (months):		3

### PRECAUTIONS

For industrial use only. Keep away from children.

Refer to the Material Safety Data Sheets (MSDS forms) pertaining to this product before using.

Avoid contact with skin or eyes. In the event of an eye splash or contact, immediately flush with cold water for 15 minutes and contact a physician. If skin contact occurs, wash with mild soap and water. The wearing of safety glasses with side shields and impervious gloves is recommended.

### **PRODUCT WARNING STATEMENT**

May cause allergic skin reaction. Avoid all contact with skin, eyes, and clothing. Wash thoroughly after handling.

To the best of our knowledge, the information contained herein is accurate. However, STAR TECHNOLOGY, Inc., does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. The information contained herein is considered typical properties and is not intended to be used as specifications for our products. This information is offered solely to assist purchaser in selecting the appropriate products for purchaser's own testing. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein and in the material safety data sheet, we cannot guarantee that these are the only hazards that exist. Repeated and prolonged exposure to epoxy resins can cause sensitization or other allergic responses.