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ER3201

Two Part High Voltage Encapsulation Epoxy

DESCRIPTION

ER3201 is a two part, heat cured epoxy specially formulated for the encapsulation of high vibration coil systems. The combination of low viscosity, good thermal shock resistance and rapid cure at elevated temperatures makes ER3201 an excellent candidate for these demanding applications. ER3201 should be degassed prior to use and used under vacuum conditions during the actual potting and encapsulation applications. Parts to be potted should be pre-heated when possible. For optimum results, the ER3201 should be dispensed at 95° to 105°C and at a vacuum of 1.0 torr or less. Parts should be gelled at 95°C for 1 hour and post cured for 3 hours at 150°C for optimum development of physical properties.

TYPICAL PROPERTIES [Cured 30 minutes at 100°C]	TEST METHOD	VALUE
Gel Time [45 Gram Mass] (minutes):		
At 100°C [Heat Cure]:		30
At 23 °C:		>1500
Cure Schedule (hours, °C):		1 at 95 + 3 at 150
		16 at 95
Shore D Hardness:	ASTM D2240	85
Tensile Strength (psi):	ASTM D638	1268
Dielectric Strength [0.125"] (volts/mil):		>450
Volume Resistivity (ohms/cm^3):		6.3×10^{14}
Tg (°C):	ASTM D3418	103
CTE (unit/unit/°C)		66.4×10^{-6}
Shrinkage (%):		0.36
Part A:		
Specific Gravity (g/cc):	ASTM D1475	1.69
Viscosity (cps):	ASTM D2393	55000
Color		Grey
Weight/Gallon (lb)		14.08
Part B:		
Specific Gravity (g/cc):	ASTM D1475	1.01
Viscosity (cps):	ASTM D2393	450
Color		Straw to Amber
Weight/Gallon (lb)		8.42
Mixed Product:		
Specific Gravity (g/cc):	ASTM D1475	1.46
Viscosity (cps):	ASTM D2393	5000
Color		Grey
Weight/Gallon (lb)		12.25
Mix Ratio:		
By Weight:		100: 44
Shelf Life (months):		
Part A:		6
Part B:		12

200 EXECUTIVE DRIVE, WATERLOO, IN 46793
P 800.741.7833 OR 260.837.7833 F 260.837.7834
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APPLICATION PROCEDURES

Carefully weigh out appropriate amounts of resin and hardener into a clean mixing container and thoroughly mix until all streaks and striations are gone. Scrape the sides and bottom frequently to ensure complete mixing.

For 1# and 2# kits, add all of Part B to Part A and mix thoroughly.

CAUTION: Unmixed compound from the sides or bottom of the container can cause soft spots or uncured areas in the completed piece. To prevent this, transfer the entire mixed contents to a second clean container and remix for a short time before using.

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.

RESIN AND HARDENER WARNING STATEMENT

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

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