ELANTAS
Electrical Insulation

Technical Data Sheet

Secondary Insulation

Epoxylite® E 234

Two-Component Epoxy Impregnating Resin

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Epoxylite® E 234 Epoxy

Product Description

Epoxylite® E 234 Epoxy is a two-component, low temperature curing, 100%-solids resin system.

Areas of Application

Impregnation of motor and transformer windings including high-speed armatures

Features and Benefits

- Excellent penetration in trickle application
- High bond strength
- Chemical and moisture resistant
- Fast cure with low heat
- Ideal for appliance motors and other high-speed rotating devices

Application Methods

Trickle

Transportation / Storage

Store below 25°C / 77°F in a dry controlled environment out of direct sunlight. This material should be suitable for use stored under these conditions in the original sealed containers for twelve (12) months from the date of shipment.

Failure to store the product as recommended above may lead to deterioration in product performance.

Mix individual components thoroughly before use.

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		Epoxylite® E 234 Resin	**Epoxylite® C 234 Hardener**	
Viscosity	25°C / 77°F	1,000 – 2,000	100 - 500	cP
Weight per Gallon	25°C / 77°F	9.4 – 9.8	8.4 – 8.8	pounds
Flash Point	ASTM D93	> 94 > 201	> 94 > 201	°C °F
Mix Ratio	Parts by weight Parts by volume	100 100	20 22.3	

Epoxylite® E 234 Epoxy

Typical Properties of Mixed Materials

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	800 - 1800	cP
Gel Time	25°C / 77°F – 250 grams	15 - 25	minutes

Application / Curing Schedule

Preheat unit to 85 - 95°C / 185 - 203°F

Trickle mixed resin onto unit and allow to gel. Post-cure 15 minutes at 100°C / 212°F. Allow 2 - 7 days to develop full properties.

Alternatively, allow to gel at room temperature and post-cure for 16 hours at 60°C / 140°F.

The cure schedules above are based on time after the unit reaches the specified temperature and are recommendations only. The user is responsible for determining the optimum cure conditions for his application.

Typical Mechanical Properties

Property	Conditions	Value	Units
Helical Coil Bond Strength ASTM D2519 over MW 35	25°C / 77°F 150°C / 302°F	26 2	pounds pounds
Hardness	Shore D	87	
Water Absorption	24 hours @ 25°C / 77°F	0.2	%

Typical Electrical Properties

Property	Conditions	Value	Units
Dielectric Strength ASTM D149	25°C / 77°F - 3 mils	1200	volts/mil
Volume Resistivity	ASTM D257 – 25°C / 77°F	8.0×10^{14}	ohm-cm
Dielectric Constant	1 kHz – 25°C / 77°F	3.7	
Dissipation Factor	1 kHz – 25°C / 77°F	0.02	

The above properties are typical values and are not intended for specification use.