

Technical Data Sheet

Secondary Insulation

EpoxyLite[®] E 6961 Black

Single-Component Epoxy Impregnating Resin

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Epoxylite® E 6961 Black Resin

Product Description

Epoxylite® E 6961 Black is a slightly thixotropic, heat-curable epoxy resin.

Areas of Application

Impregnation of random wound traction and wound rotor motors with hot start requirements

Features and Benefits

- No hardener required
- Outstanding resistance to chemicals, including refrigerants
- Excellent thermo-mechanical and vacuum outgassing properties
- Suitable for service up to Class 220

Application Methods

- Vacuum-Pressure Impregnation

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 six (6) months from the date of shipment.

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

Mix thoroughly before use

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	6,000 - 9,000	cP
Weight per Gallon	25°C / 77°F	9.8 – 10.2	pounds
Flash Point	ASTM D93	> 94 > 201	°C °F
Gel Time	150°C / 302°F	12 – 18	minutes

Curing Schedule

3 hours at 150°C / 302°F plus 3 hours at 180°C / 356°F. Rotational cure at 3 to 6 rpm will enhance appearance and resin retention.

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.

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Typical Mechanical Properties

Property	Method	Conditions	Value	Units
Helical Coil Bond Strength over MW 16	ASTM D2519	25°C / 77°F	53	pounds
Lap Shear Strength	ASTM D1002	200°C / 392°F	1000	psi

Typical Electrical Properties

Property	Method	Conditions	Value	Units
Dielectric Strength	ASTM D149	25°C / 77°F	> 1400	volts/mil
Dissipation Factor	ASTM D150	1 kHz – 25°C / 77°F	0.01	
Dielectric Constant	ASTM D150	1 kHz – 25°C / 77°F	4.2	
Volume Resistivity	ASTM D257	25°C / 77°F	> 1 x 10 ¹⁵	ohm-cm

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

ELANTAS PDG, Inc. warrants the chemical composition of its products within stated tolerances, but does not guarantee that a product will be appropriate for any particular application. Any recommendation, performance of tests or suggestion is offered merely as a guide and is not a substitute for a thorough evaluation by the user. No representative of ELANTAS PDG, Inc. has the authority to offer a warranty that a product will perform satisfactorily in manufacturing a product and no such representation should be relied upon.