

Technical Data Sheet

Secondary Insulation  
Impregnating Resin

**Pedigree 600 Polyester Resin**

Two component, high bond strength resin

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**Description**

The Pedigree 600 is an unsaturated polyester resin in styrene, high bond strength makes it an excellent choice for impregnation of high speed armatures.

**Uses**

- Impregnation of small and large armatures.
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**Cured Properties**

The Pedigree 600 is high bond strength resin system designed for use in high speed armatures.

**Catalyst**

Peroxide catalyst is required to facilitate the proper cure of this resin system. TBP is recommended at a mix ratio of 100 parts resin to 1 parts of TBP by weight.

**Recommended Cure**

Minimum of 20 minutes at 165-180 °C (325 - 350 °F) after part reaches cure temperature

**Features and Benefits**

- Low temperature curing
- High bond strength
- Offers thermal ratings from 130° C to 220° C

**Application Methods**

- Dip and Bake
- Trickle

**Storage/Shelf Life**

This resin should be stored at a 25 °C in a dry controlled environment out of direct sunlight. This material should be suitable for use stored under the conditions in the original sealed containers for six (6) months from the date of shipment.

**Properties of Material Supplied**

<i>Test</i>	<i>Value</i>	<i>Units</i>
Viscosity @ 25 °C (77 °F) (ASTM D2196)	235 – 305	Cp
Sunshine Gel Time @ 100 °C (212 °F) w/ 1% TBP (ASTM D3056)	15 – 25	Minutes
Flash Point (ASTM D93)	28(83)	°C (°F)

### TYPICAL PROPERTIES

#### Mechanical Properties – Resin w/ 1% TBP, Cured 1 hour at 200 °C (390 °F)

<i>Test</i>	<i>Value</i>	<i>Units</i>
Helical Coil Bond Strength @ 25 °C (77 °F) (ASTM D2519)	62	Pounds
Helical Coil Bond Strength @ 150 °C (300 °F) (ASTM D2519)	18	Pounds
Hardness, Shore D (ASTM 2240)	84	

#### Electrical Properties

<i>Test</i>	<i>Value</i>	<i>Units</i>
Dielectric Strength – AS MADE (ASTM D149)	3400	Volts/mil
Dielectric Strength after 24 hours in water (ASTM D149)	3800	Volts/mil
Film thickness	1.5	mils

#### UL Recognized Insulation Systems (E87039, E103575)

<i>Class</i>	<i>Systems</i>
Class 130	PDG 1, 2, 6, 12, 106, 107, 110, 111
Class 155	PDG 3, 9, 102, 108, 86-155-1
Class 180	PDG 14, H-1, 91-180-1, 86-180-5
Class 200	PDG7, 10
Class 220	PDG 15
Class 240	PDG 16

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