

Technical Data Sheet

Secondary Insulation
Impregnating Resin

Pedigree 433-75-VTC Hi Performance Polyester Resin

Single component , high bond strength

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Description

The Pedigree 433-75-VTC is an unsaturated polyester resin in vinyl toluene. It is an excellent choice for impregnation of stators.

Uses

- Impregnation of stators and armatures.

Cured Properties

The Pedigree 433-75-VTC is a high bond resin. It has excellent high temperature resistance and is included in UL recognized insulation systems up to Class 220.

Catalyst

No catalyst is required.

Recommended Cure

After unit has reached temperature, cure at 150° to 200° C (300° to 390° F) for 2 to 3 hours.

Features and Benefits

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

Application Methods

- Dip and Bake
- Vacuum Pressure Impregnation (VPI)
- Vacuum Impregnation (VI)

Storage/Shelf Life

This resin should be stored at a 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.

Properties of Material Supplied

Test	Value	Units
Viscosity @ 25°C (77°F) (ASTM D2196)	600 – 800	Cp
Sunshine Gel Time @ 100°C (212°F) (ASTM D3056)	70 - 95	Minutes
Flash Point (ASTM D93)	53 (127)	°C (°F)

TYPICAL PROPERTIES

Mechanical Properties – Cured 2 hours at 200 °C (390 °F), Single dip

<i>Test</i>	<i>Value</i>	<i>Units</i>
Helical Coil Bond Strength @ 25 °C (ASTM D2519) MW35	47	Pounds
Helical Coil Bond Strength @ 150 °C (ASTM D2519) MW35	13	Pounds
Hardness, Shore D (ASTM 2240)	76	

Electrical Properties

<i>Test</i>	<i>Value</i>	<i>Units</i>
Dielectric Strength – AS MADE (ASTM D149)	5400	Volts/mil
Dielectric Strength after 24 hours in water (ASTM D149)	2800	Volts/mil
Film thickness	1.7	mils

UL Recognized Insulation Systems (E87039)

<i>Class</i>	<i>Systems</i>
Class 130	PDG 1, PDG 2
Class 155	PDG 3, PDG 9, PDG 108
Class 180	PDG 109, PDG H-1, PDG 14
Class 200	PDG 7, PDG 10
Class 220	PDG 15

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