

**Technical Data Sheet**

**Secondary Insulation**

**RanVar™ B534-15**  
(RanVar™ B540-15)

**Solvent-borne Impregnating Resin**

# RanVar™ B534-15

## Product Description

RanVar™ B534-15 is a single-component, solvent-borne, heat-cured impregnating resin. <sup>[1]</sup>

## Areas of Application

Impregnation of motor stators and transformers

## Features and Benefits

- General-purpose
- Tough, semi-flexible film
- Low viscosity for excellent penetration
- Resistant to moisture, oils and acids
- Excellent tank stability
- UL recognized insulation systems up to Class 220

<sup>[1]</sup> RanVar™ B534-15 is a direct replacement for RanVar™ B540-15 (discontinued in 2010). B540-15 and B534-15 are identical in composition and performance. They are co-listed in ELANTAS UL File E75225 and can be used interchangeably.

## Application Methods

- Dip-and-Bake
- Roll-through

## 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 this product as recommended above may lead to deterioration in product performance.

Keep containers tightly sealed to minimize evaporation

Mix product thoroughly before use

## Health / Safety

Refer to the Material Safety Data Sheet.

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## Typical Properties of Material as Supplied

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	80 - 160	cP
Appearance		Clear amber liquid	
Non-Volatile Content	1½ g – 3 h – 135°C	44.0 - 46.0	%
Weight per Gallon	25°C / 77°F	7.55 - 7.75	pounds
Viscosity Reducer		ELAN-Plus™ BS-107 Reducer	
Flash Point	ASTM D93	15 59	°C °F
Volatile Organic Content	ASTM D3960-92	4.2 <sup>[2]</sup>	pounds / gallon

<sup>[2]</sup> VOC test methods and limits vary widely by regulatory jurisdiction and product application. The value above was obtained by curing a thin film under specific laboratory conditions (0.5 grams - 1 hour - 110°C). Contact your ELANTAS PDG representative regarding alternate methods.

## RanVar™ B534-15

### Application / Curing Schedule

See ELANTAS PDG Processing Guide *PG-113 – Dip Processing Solvent-Borne Impregnating Resins*.

Cure for 4 hours at 150°C / 302°F – or – 2 hours at 163°C / 325°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 - Specimens double-dipped - cured 2 hour at 163°C / 325°F

Property	Test Method	Conditions	Value	Units
Build			2	mils
Helical Coil Bond Strength over MW 35	ASTM D2519	25°C / 77°F	30	pounds
		150°C / 302°F	6	pounds

### Typical Electrical Properties

Property	Test Method	Conditions	Value	Units
Dielectric Strength	ASTM D149	25°C / 77°F - 2 mils	4400	volts/mil
Dielectric Strength	ASTM D149	25°C / 77°F - 2 mils After 24 hours in water	4000	volts/mil

### UL Recognized Insulation Systems (ELANTAS File E87039)

Thermal Class	System
Class 130	MEGA I
Class 155	MEGA II
Class 180	MEGA III
Class 220	MEGA V

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.