

# General Purpose Motors

## Liquid Electrical Insulation Resin Solutions

# General Purpose Motors

Most households use a number of general purpose motors. From dishwashers, to washers and dryers, to air conditioners and heaters, home owners rely on these appliances for their everyday needs and comforts.

To keep these appliance motors running like new, manufacturers rely on a proven electrical insulation system. This system provides protection from temperature changes, chemicals, and moisture.

## Product Summary

Pedigree®, RanVar™, ELAN-Safe®, ELAN-Guard® and Isonel® resins are perfect for keeping your general purpose motors in top performance condition day after day.

**Pedigree®** resins offer a long field service history in impregnation of motor coils.

**RanVar™** resins provide outstanding moisture and chemical resistance in small and large motor applications.

**ELAN-Safe®** resins are low VOC, HAPS free waterborne products perfect for impregnation of motors.

**ELAN-Guard®** resins are environmental friendly epoxy emulsions with excellent bond strength. Suitable for use in hermetic applications.

**Isonel®** resins are longstanding industry standards for use in general purpose motor applications.



ELANTAS PDG, Inc. is a team of professionals with access to the latest international research developments and technical advancements in the production of high quality electrical insulation products offering long term reliability.

## Solutions For

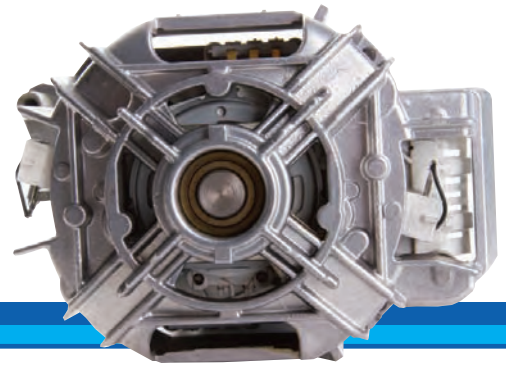
- Reducing Emissions
- Reducing Cycle Time
- Moisture Resistance
- Energy Savings
- UL Recognition
- Turn-to-Turn Failures



# Application Methods

VPI • Trickle

Dip & Bake



## Product Characteristics at a Glance

Product	Unique Characteristics	Thermal Class MW35 Twisted Pair	Viscosity (cP) @ 25°C/77°F	Voltage			Application Method		
				High	Medium	Low	VPI	Dip & Bake	Trickle
RanVar™ R2003 VTC	A unique copolymer resin in vinyl toluene. It exhibits excellent moisture and chemical resistance. It is a high bond strength resin used in the impregnation of small and large motors including high voltage. Included in multiple UL recognized insulation systems.	180	450 - 750	✓	✓	✓	✓	✓	
Pedigree® 433-75 VTC	An unsaturated polyester resin in vinyl toluene. It is an excellent choice for impregnation of stators and transformers with high bond strength. Included in multiple UL recognized insulation systems.	180	600 - 900	✓	✓	✓	✓	✓	
RanVar™ B7-373 VT RanVar™ B7-373 VTC	A semi-rigid, unsaturated polyester resin in vinyl toluene. Excellent penetration capability. Good film build with a single dip. Low dissipation factor at elevated temperatures. Excellent chemical and moisture resistance. Available in two component or one component pre-catalyzed versions. Included in multiple UL recognized insulation systems.	180	900 - 1200	✓	✓	✓	✓	✓	
ELAN-Safe® 21-0U01-75	A single component waterborne resin offering lower VOC than conventional insulating varnishes. Used in the impregnation of motor coils. Supplied at 75% solids and ready to be thinned with water. Included in multiple UL recognized insulation systems.	180	7000 - 20000		✓	✓		✓	
Pedigree® 600 S	An unsaturated polyester resin in styrene. High bond strength makes it an excellent choice for the impregnation of small and large high speed armatures. Included in multiple UL recognized insulation systems.	180	235 - 305		✓	✓		✓	✓
Pedigree® 70 VTC	An unsaturated polyester resin in vinyl toluene. It is a highly versatile, resilient resin and an excellent choice for impregnation of motor coils. Included in multiple UL recognized insulation systems.	180	275 - 450	✓	✓	✓	✓	✓	✓
Pedigree® 8183 VT	A semi-rigid, unsaturated polyester resin in vinyl toluene. Its low temperature cure makes it an excellent choice for impregnation of small and large stators and armatures. Included in multiple UL recognized insulation systems.	180	150 - 250			✓		✓	✓
ELAN-Guard® EM 59 MR Series	An epoxy emulsion resin with excellent resistance to all types of refrigerants. Used in the impregnation of motor coils. Offers low viscosity and high stability, can be thinned with water and has zero VOC. Included in multiple UL recognized insulation systems.	180	10 - 200			✓		✓	
RanVar™ B277	A styrenated alkyd air-drying or baking varnish. Available in clear or black with fast drying characteristics. Excellent moisture and humidity resistance. Included in multiple UL recognized insulation systems.	180	400 - 800			✓		✓	
Isonel® 31-398	A general-purpose, solvent-borne insulating varnish used in the impregnation of motor coils. Has low viscosity and offers excellent stability. Included in multiple UL recognized insulation systems.	180	250 - 350			✓		✓	

Alternate cure schedule may be possible for your application. Consult with your ELANTAS PDG representative.

For More Information Ask For Our Technical Data Sheets.

# ELANTAS PDG, Inc.

## ELANTAS Electrical Insulation

Around the world, ELANTAS Electrical Insulation companies are respected as market leaders in the development and manufacturing of impregnating resins (varnishes), wire enamel, potting compounds and casting resins for a number of electrical, industrial, aerospace and civil applications. No matter what your challenge, be assured that ELANTAS Electrical Insulation products will meet your most demanding needs.

## ELANTAS PDG, Inc.

Today, ELANTAS PDG, Inc. is recognized as the premier global supplier of specialty polymers for the electrical and electronic industries. ELANTAS PDG, Inc. is a member of ALTANA's ELANTAS Electrical Insulation Division based in Wesel, Germany.

With the support of ALTANA and by working with other ALTANA divisions, we offer a unique global approach to research, manufacturing and service that translates into more creative solutions, dependable supply and consistently high quality.

Many ELANTAS PDG, Inc. products are recognized as components of electrical insulation systems in accordance with UL 1446. ELANTAS PDG, Inc. is registered to ISO 9001 and ISO/TS 16949.

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A member of  **ALTANA**



ELANTAS PDG, Inc. headquarters in St. Louis, Missouri

ELANTAS Electrical Insulation companies are strategically located throughout the world to meet the primary insulation, secondary insulation and electronic and engineering materials needs of our customers.

### AMERICAS

ELANTAS PDG, Inc.  
ELANTAS Isolantes,  
Electricos do Brasil

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ELANTAS Tongling  
ELANTAS Zhuhai

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