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.

ELANTAS PDG, Inc.
5200 North Second Street
St. Louis, MO 63147 USA
Tel 314.621.5700
Fax 314.436.1030
info.elantas.pdg@altana.com
www.elantas.com

A member of ALTANA

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 impregnation of motors. RanVar® resins are low VOC, HAPS free waterborne products perfect for impregnation of motors. ELAN-Safe® resins are environmental friendly epoxy emulsions with excellent bond strength. Suitable for use in hermetic applications. Isonel® resins are low VOC, HAPS free waterborne products perfect for impregnation of motors. ELAN-Guard® resins are low VOC, HAPS free waterborne products perfect for impregnation of motors.

Solutions For

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

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.

Application Methods

VPI • Trickle

Dip & Bake

Product Characteristics at a Glance

<table>
<thead>
<tr>
<th>Product</th>
<th>Unique Characteristics</th>
<th>Thermal Class</th>
<th>Voltage</th>
<th>Application Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>RanVar® R2000 VTC</td>
<td>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.</td>
<td>180</td>
<td>High</td>
<td>Trickle, Dip &amp; Bake</td>
</tr>
<tr>
<td>Pedigree 433-75 VTC</td>
<td>An unsaturated polyester resin in vinyl toluene. It is an excellent choice for impregnation of motors and transformers with high bond strength. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>Medium</td>
<td>Trickle, Dip &amp; Bake</td>
</tr>
<tr>
<td>RanVar® BT-073 VT</td>
<td>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 versions. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>Low</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>RanVar® BT-073 VTC</td>
<td>A single component waterborne resin providing 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.</td>
<td>180</td>
<td>Medium</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>Pedigree 600 D</td>
<td>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.</td>
<td>180</td>
<td>High</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>Pedigree 70 VTC</td>
<td>An unsaturated polyester resin in vinyl toluene. It is a highly versatile, resilient resin and an excellent choice for impregnation of motors. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>Medium</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>Pedigree 8123 VTC</td>
<td>A semi-rigid, unsaturated polyester resin. 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.</td>
<td>180</td>
<td>Low</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>ELAN-Guard EM 50 BR Series</td>
<td>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.</td>
<td>180</td>
<td>Medium</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>RanVar® B277</td>
<td>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.</td>
<td>180</td>
<td>Medium</td>
<td>Dip &amp; Bake</td>
</tr>
<tr>
<td>Isonel® 31-306</td>
<td>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.</td>
<td>180</td>
<td>Medium</td>
<td>Dip &amp; Bake</td>
</tr>
</tbody>
</table>

For More Information Ask For Our Technical Data Sheets.
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 Isone® 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.

Isone® 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

<table>
<thead>
<tr>
<th>Product</th>
<th>Unique Characteristics</th>
<th>Thermal Class</th>
<th>Viscosity</th>
<th>Voltage</th>
<th>Application Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>RanVar® R2065 VTC</td>
<td>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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedigree 433-75 VTC</td>
<td>An anionic 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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RanVar® BT-375 VT</td>
<td>A semi-rigid, unvarnished polyester resin in vinyl toluene. Excellent penetration capability. Good film build with a single dip. Low dissolution factor at elevated temperatures. Excellent chemical and moisture resistance. Included in two component or one component precision catalyzed formulations. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RanVar® B7-373 VTC</td>
<td>A single component waterborne resin offering lower VOC than conventional insulating varnishes. Used in the impregnation of motor coils. Supplied at 70% solids and ready to be thinned with water. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEDSAFE 21-406-13 VTC</td>
<td>An anionic 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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEDSAFE 600 S</td>
<td>An anionic polyester resin in styrene. Its low temperature cure makes it an excellent choice for the impregnation of small and large high speed armatures. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEDSAFE 70 VTC</td>
<td>An anionic polyester resin in styrene. It is a highly versatile, resilient resin and an excellent choice for impregnation of motor coils. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEDSAFE 8182 VTC</td>
<td>A semi-rigid, unvarnished 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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELANGUARD EM-50 MR Series</td>
<td>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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RanVar® B277</td>
<td>A styrenated liquid 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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isone® 31-366</td>
<td>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.</td>
<td>180</td>
<td>High, Medium, Low, Dip &amp; Bake, Trickle</td>
<td></td>
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Ask For Alternate cure schedule may be possible for your application. Consult with your ELANTAS PDG representative.

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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

ASIA
ELANTAS Beck India
ELANTAS Tongling
ELANTAS Zhuhai

EUROPE
ELANTAS Beck
ELANTAS Italia

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5200 North Second Street
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