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 Electrical Insulation

Traction Motors

Liquid Electrical Insulation Resin Solutions
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.

**Product Summary**

Epoxylite®, Pedigree®, RanVar™, Sterling®, and CORONA-Protect® insulating resins are perfect for keeping your traction motors in top-performance condition day after day.

Epoxylite® resins are used in overcoating and impregnation of armatures, stators and coils in motors and generators.

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.

Sterling® resins have excellent stability and a long field history under demanding conditions. Used in the impregnation of small and large stators.

CORONA-Protect® resin is perfect for motors that are subject to high voltage and harsh environmental conditions.

**Solutions For**

- Excessive Vibration
- Turn-to-Turn Failure
- Moisture Resistance
- Environmental Hazards
- Thermal Shock
- End Turn Movement
- Excessive Heat Rise
- Loose Coils

**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>
</tr>
</thead>
<tbody>
<tr>
<td>EpoxyResin E 478 THC</td>
<td>A heat-curing epoxy resin system designed for use with uncatenlated tapes. Designed for use in medium voltage motors and generators as well as random wound motors. Offers low viscosity, thermal ratings up to 180°C, excellent stability and in reel moisture sensitivity. Included in multiple UL recognized insulation systems.</td>
<td>MW35</td>
<td>High Medium Low</td>
</tr>
<tr>
<td>Pedigree® 433-75 VTC</td>
<td>An unsaturated polyester resin in vinyl ester. It is an excellent choice for impregnation of stators with high bond strength. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>600 - 800</td>
</tr>
<tr>
<td>Pedigree® 5180 VT</td>
<td>An unsaturated polyester resin in vinyl ester. Low temperature cure and flexibility make it an excellent choice for impregnation of small and large stators. It is a flexible resin system designed for noise suppression in transformers. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>150 - 200</td>
</tr>
<tr>
<td>RanVar™ R2003 VTC</td>
<td>A unique copolymer resin in vinyl ester. It exhibits excellent moisture and chemical resistance. It is a high bond strength resin used in the impregnation of small and large stators including high voltage. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>400 - 700</td>
</tr>
<tr>
<td>Sterling® PB 302-LV-2</td>
<td>A modified polybutadiene resin in vinyl ester. Excellent impregnation for a wide variety of electrical apparatus. Superior long term moisture resistance. Low dissipation factor. Very low weight loss at high temperatures. Designed for both AC and DC traction motor applications.</td>
<td>180</td>
<td>300 - 410</td>
</tr>
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</table>

For More Information Ask For Our Technical Data Sheets.
**Application Methods**

VPI • Trickle

Dip & Bake

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<td><strong>EpoxyKem E 478 Thixo</strong></td>
<td>A heat curing epoxy resin system designed for use with uncatalyzed tapes. Designed for use in medium and high voltage motors and generators as well as random wound motors. Offers low viscosity, thermal ratings up to 180°C, excellent stability and no mold moisture sensitivity. Included in multiple UL recognized insulation systems.</td>
<td>High</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>Pedigree® 433-75 VTC</strong></td>
<td>An unsaturated polyester resin in vinyl toluene. It is an excellent choice for impregnation of stators with high bond strength. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>Pedigree® 5110 VT</strong></td>
<td>An unsaturated polyester resin in vinyl toluene. Low temperature cure and flexibility make it an excellent choice for impregnation of small and large stators. It is a flexible resin system designed for noise suppression in transformers. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>✓ ✓</td>
</tr>
<tr>
<td><strong>RanVar™ B7-373 VT</strong></td>
<td>A semi-rigid, unsaturated polyester resin in vinyl toluene. Excellent penetration capability. Good film build for a single dip. Low dissipation factor at elevated temperatures. Excellent chemical and moisture resistance. Approved by various municipal transit authorities. Available in two-component and one-component precatalyzed versions. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>RanVar™ R2603 VTC</strong></td>
<td>A unique copolymer resin in vinyl toluene. Excellent stability and moisture and chemical resistance. It is a high bond strength resin used in the impregnation of small and large rotors including high voltage. Included in multiple UL recognized insulation systems.</td>
<td>180</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>Sterling® PB 302-LV-2</strong></td>
<td>A modified polybutadiene resin in vinyl toluene. Excellent impregnation for a wide variety of electrical apparatus. Superior long term moisture resistance. Low dissipation factor. Very low-weight loss at high temperatures. Designed for both AC and DC traction motor applications.</td>
<td>180</td>
<td>✓ ✓ ✓ ✓</td>
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**Traction Motors**

The move to electric cars and public transportation has been a key aspect of the green initiative in many countries globally. Public transportation, whether it be trains, trolleys, mass transit or high speed rail, removes cars from the road, which contributes to a green environment by reducing carbon dioxide (CO2) emissions. The changes in size and structure of the modern traction motors require a proven electrical system to protect against electrical, thermal or mechanical stresses.

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