



# Resins, Varnishes, and Epoxies for **Electric Motor Repair**

# Electric Motor Repair

## Protect Your Motors From the Elements

No matter what type of electric motor or transformer you need to repair, ELANTAS PDG, Inc. has the electrical insulation product perfect for your application need.

Whether you are looking for extreme high heat protection or to simply seal a crack in a diesel A frame, our versatile, field-tested products are solutions you can count on.

ELANTAS PDG, Inc. provides a tank maintenance program which helps you ensure the quality of your material necessary to meet your application requirements.



## Product Characteristics at a Glance

| Product                             | Description   | Unique Features & Advantages  |
|-------------------------------------|---|---|
| <b>Vacuum Pressure Impregnation</b> |   |   |
| <b>Pedigree® 433-75 VTC</b>         | High performance precatylyzed unsaturated polyester in vinyl toluene monomer.                       | High bond strength, excellent high heat resistance. Ideal for impregnation of stators and transformers. UL recognized insulation systems up to 220°C.   |
| <b>Pedigree® 70 VTC</b>             | High performance precatylyzed unsaturated polyester resin in vinyl toluene monomer.                 | Versatile resin available in precatylyzed and room-temperature system. Ideal for impregnation of stators and transformers where good electrical and moisture resistant properties are needed. UL recognized insulation systems up to Class 240°C.   |
| <b>EpoxyLite® E 478 Thixo</b>       | Single component thixotropic epoxy.   | The industry standard for the medium voltage power generation industry and Navy and commercial rewinding operations. High bond strength. Refrigerant and chemical resistant for operation in corrosive environments. UL recognized insulation systems up to Class 180°C.                                      |
| <b>EpoxyLite® E 577</b>             | Single component epoxy.   | Ideal for impregnation of high voltage motors and generators up to 13.8 kV. High bond strength. Chemical resistant for operation in corrosive environments. UL recognized insulation systems up to Class 180°C.   |
| <b>RanVar™ B7-373 VTC</b>           | High performance precatylyzed unsaturated polyester in vinyl toluene monomer.                       | Good film build for a single dip. Semi-flexible. Excellent chemical and moisture resistance. Excellent for traction motors - various. Municipal Transit Authority approved. UL recognized insulation systems up to Class 220°C.   |
| <b>CORONA-Protect® 82-8A03</b>      | High performance precatylyzed unsaturated polyester using nano technology in vinyl toluene monomer. | Impregnation of motor stators and transformers in severe duty applications enhanced with nano technology for improved corona protection. Reduces partial discharge. Enhanced corrosion resistance and excellent electrical properties. UL recognized insulation systems up to Class 240°C.                    |
| <b>Trickle</b>                      |   |   |
| <b>EpoxyLite® E 230 Series</b>      | Two component, low temperature cure epoxy trickle resin.  | Designed specifically for fast curing impregnating process to enable service centers to impregnate and seal stator windings in 30 minutes. High bond strength with minimal shrinkage. Chemical, refrigerant and moisture resistant. Class 180°C when tested in accordance to ASTM D3251 on MW 35 magnet wire. |
| <b>Wet Wind</b>                     |   |   |
| <b>Sterling® E-300 Series</b>       | Single component highly thixotropic epoxy   | Thixotropic wet-winding of rotating or stationary field coils with low run off. Impregnation, bonding and sealing of electrical and mechanical components. High bond strength, good chemical resistance. Suitable for service up to Class 180°C.  |

# Product Characteristics at a Glance

## Product

## Description

## Unique Features & Advantages

### Spray

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|--|---|--|
| <b>EpoxyLite® INSUL-Spray™ 7001 Series</b> | Aerosol, solvent-borne, air-drying, modified epoxy enamel. Available in Clear, White, Black, Gray, Green and Red. | Glossy finish. High dielectric strength, chemical resistant to moisture, acids, alkalis and chemicals. Suitable for Class 155 service. |
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### Dip

|                                    |   |   |
|------------------------------------|---|---|
| <b>ELAN-Guard® EM 59 MR Series</b> | Waterbased epoxy emulsion   | Epoxy emulsion for impregnation of motor windings used in hermetic compressors and other refrigeration systems. Available solids from 37 - 60%. Low VOC, high bond strength. Excellent tank stability. UL recognized insulation systems up to Class 200°C.                        |
| <b>RanVar™ B7-606 DAPC</b>         | High performance precatyzed unsaturated polyester in DAP monomer. | Designed to replace solvent and water varnishes. High flash point. High bond strength. Long catalyzed shelf life. Resistant to R-22, R-134a and R-123 refrigerants. UL recognized insulation systems up to class 220°C.   |
| <b>RanVar™ B277</b>                | Solvent-borne, air-drying or baking, modified alkyd resin.        | Fast drying characteristics - dries with the speed of lacquer. Excellent moisture resistance under humid conditions. Also available in black. Thermal ratings to Class 180°C.   |
| <b>ELAN-Safe™ 210U01-75</b>        | Water-borne modified alkyd resin.                                 | General-purpose, HAPS free, Low VOC impregnant for motor and transformer windings. Supplied as high solids solution for reduction with water to desired viscosity. Impregnation quality visible with UV light. UL recognized insulation systems up to Class 240°C.                |
| <b>Isonel® 31-398</b>              | Solvent-borne phenolic modified alkyd resin                       | Impregnant for motor and transformer windings. High bond strength. Low viscosity with excellent tank stability.<br>Qualified under MIL-I-24092D:<br>Class 155 Grade CB Composition I<br>Class 155 Grade CBH Composition II<br>UL recognized insulation systems up to Class 220°C. |
| <b>RanVar™ BT-6447</b>             | Opaque red, solvent-borne, air dry, modified alkyd resin.         | High gloss, fast drying finish coat for motor end turns. Moisture resistant. Suitable for service up to Class 180°C. Meets Siemens spec 32230AA.  |
| <b>RanVar™ B6-665</b>              | Opaque red, solvent-borne, air-dry modified epoxy enamel.         | High gloss, high dielectrics, good film build, and excellent resistance to acids, alkali, and chemicals. 15 minute dust free and 1 hour dry to touch time. Meets Siemens 32230CM/CP specifications. Also available in aerosol cans.   |

### Other

|                            |   |   |
|----------------------------|---|---|
| <b>EpoxyLite® E-8110</b>   | Red epoxy two component, room temperature cure injection cartridge kit. | Blocking and sealing of form wound coil motors and end turns, between form wound coils, surge ring ties, coil exit from slot, stub connections. High adhesion with low shrinkage. Excellent resistance to moisture, chemicals and oils.   |
| <b>EpoxyLite® E 8117</b>   | Two-component room temperature cure filled epoxy for sealing.           | Convenient one to one mix ratio by weight. Highly thixotropic paste. Easy to identify thorough mixing: the yellow and blue components turn green when mixed. Resists moisture, acids, alkalis, corrosive salts and lubrication oils.  |
| <b>RanVar™ TR-315</b>      | Red epoxy two component, room temperature cure system.                  | Highly filled, non-sagging sealing, patching and adhesive compound for protection of electrical apparatus subject to chemical and corrosive environments. Convenient 1:1 mix ratio. Available in cartridge packaging. For sealing lead wires in junction boxes, coating bus bars, armature and stator end windings. Suitable for Class 155°C. |
| <b>Sterling® E-003</b>     | Single component highly thixotropic epoxy.                              | Thixotropic, putty-like compound, non-slumping designed to be used as a balancing compound with good heat dissipation. Also used for sealing and patching material for filling in voids, such as end windings of stators and armatures.   |
| <b>Sterling® T-723T</b>    | Solvent-borne, air dry adhesive.  | Adhesive to bond mica and cotton tape. Varnished, treated and untreated glass tape. Air dries rapidly, does not loosen with heat. Resistant to solvent-based impregnating resins immediately after application. Supplied in 50-gram squeeze tubes.  |
| <b>ELAN-Tron® E GRC 69</b> | Two component, highly thixotropic epoxy system.                         | Bonding and staking adhesive for electrical and electronic components. Highly thixotropic, non-sagging sealing, patching and adhesive compound for protection of electrical apparatus subject to chemical and corrosive environments. Convenient 1:1 mix ratio. Available in cartridge packaging.   |
| <b>ELAN-Tron® E-203</b>    | Two component, room temperature cure epoxy kit                          | Epoxy adhesive, chemically resistant cure-in-place paste. Typical maintenance and repair applications: bonding broken ceramic bushings; sealing cracks in diesel engine A frames, sealing leaking transformers; repairing glass lined vats.   |

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

# 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.

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