

# 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 9001:2000 and ISO/TS 16949:2002- Second Edition.

## 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



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

### ASIA

ELANTAS Beck India  
ELANTAS Tongling  
ELANTAS Zhuhai

### EUROPE

ELANTAS Beck  
ELANTAS Italia



Solid Insulation Solutions for Motors and Motor Repair

# ELAN-Film™ HT-180



A member of  ALTANA



# ELAN-Film™ for Motors and Motor Repair

Motors turn electrical energy into mechanical energy to perform various work functions for a multitude of diverse applications.

Modern day electric motors perform much of the work required for daily living. Motor performance is dependent upon efficient and effective electrical insulation to provide protection from premature failure.



## Product Summary

ELAN-Film™ HT-180 is a composite PET film coated on each side with a 50 gauge layer of ELANTAS PDG, Inc. Tritherm® polyamideimide. The composite construction gives the film a fully integrated structure suitable for slitting, forming and cutting.

The ELANTAS PDG, Inc. Tritherm® products have served a long history as a high performing primary insulation for magnet wire.

ELAN-Film™ HT-180 offers superior electrical properties and is rated as UL Class H (180°C).

ELAN-Film™ HT-180 provides outstanding moisture and chemical resistance and has excellent bonding with ELANTAS Brand varnishes and secondary insulating resins.

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.

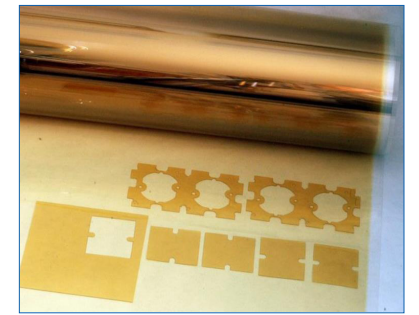
## Solutions For

- **Wedges**
- **Slot Liners**
- **Phase Separation / Phase Liner**
- **High Temperature Environments**

<b>PAI</b>		<b>0.5 mil</b>
<b>PET</b>		<b>varies</b>
<b>PAI</b>		<b>0.5 mil</b>

## Application Methods

- **Laser Cutting**
- **Die Cutting**
- **Mechanical Insertion**



## Product Characteristics at a Glance

UL Classification				
Property	Test Method	Unit	Value	Class
Thermal Classification	UL 1446	°C	180	H

Electrical Properties of ELAN-Film™ HT-180					
Property	Test Method	Units	114 µm film	190 µm film	279 µm film
<b>Dielectric Strength</b>	ASTM D149	Volts	11,100	14,300	16,100
<b>Volume Resistivity</b>	ASTM D257	ohms-cm	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>15</sup>
<b>Surface Resistivity</b>	ASTM D257	ohms/square	10 <sup>13</sup>	10 <sup>14</sup>	10 <sup>14</sup>

Water Absorption of ELAN-Film™ HT-180					
Property	Test Method	Unit	Result		
			114 µm film	190 µm film	279 µm film
Water Absorption	Full immersion of test sample in water for 24 hours	Percent Gain	0.5	0.4	0.4

Dissipation Factor and Dielectric Constant of ELAN-film™ HT-180 in Humid Environments (215 µm total film thickness)						
Conditions (DC and DF tested @ 25°C)	Dielectric Constant			Dissipation Factor		
	100 Hz	500 Hz	1 kHz	100 Hz	500 Hz	1 kHz
Tested as is	2.4	3.1	3.4	0.03	0.003	0.008
After 168 hours in 100% humidity at 40°C	2.2	3.1	3.7	0.02	0.005	0.008

For More Information Ask For Our Technical Data Sheets.