



Flexible Insulation Solutions for Motors and Motor Repair

ELAN-Film® HT-180 insulation

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 insulation 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 insulation offers superior electrical properties and is rated as UL Class H (180°C).

ELAN-Film® HT-180 insulation 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.

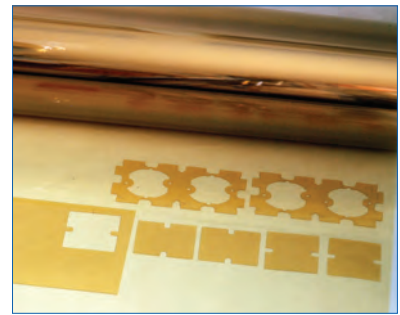
Solutions For

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

PAI		0.5 mil
PET		varies
PAI		0.5 mil

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 insulation					
Property	Test Method	Units	114 µm film	190 µm film	279 µm film
Dielectric Strength	ASTM D149	Volts	11,100	14,300	16,100
Volume Resistivity	ASTM D257	ohms-cm	10 ¹⁵	10 ¹⁵	10 ¹⁵
Surface Resistivity	ASTM D257	ohms/square	10 ¹³	10 ¹⁴	10 ¹⁴

Water Absorption of ELAN-Film® HT-180 insulation					
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 & Dielectric Constant of ELAN-Film® HT-180 insulation 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.

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. 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.

EUROPE

ELANTAS Europe

ASIA

ELANTAS Zhuhai Co. Ltd.
ELANTAS Tongling Co. Ltd.
ELANTAS Malaysia Sdn. Bhd.
ELANTAS Beck India Ltd.

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