

Technical Data Sheet

Self Laminating Clear Polyvinylidene Fluoride Film

This specification is intended to outline the physical and chemical properties of *PANDUIT*'s pressure sensitive self laminating polyvinylidene fluoride material and include the following part numbers and printable material identifiers:

Part Number Prefixes		

Printable Material Suffixes		
T1T		
T1J		
T1D		

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is a self-extinguishing top coated polyvinylidene fluoride film with a pressure sensitive adhesive. This material is used in a self-laminating format for wire/cable marking.
Print Methods:	This material is recommended for dot matrix, thermal transfer, laser and inkjet printing.
Adhesive:	Acrylic based, pressure sensitive permanent adhesive.
Standard Colors:	Clear film with white print-on area
Thickness:	1.8 +/- 0.3 mils (substrate and adhesive)
Service Temperature Range:	-65°F to 275°F (-53.9°C to 135°C)
Minimum Application Temperature:	50°F (10°C)
Storage Conditions:	Store at 70°F (21°C) and 50% Relative Humidity.

PROPERTIES:

Peel Adhesion to Stainless Steel:

PERFORMANCE:

30 oz/in width (PSTC-101, 15 min. dwell)

66 oz/in width (PSTC-101, 72 hours dwell)

24+ hours (PSTC-107, Procedure A)

Shear Adhesion:

MD 7 lbs/inch +/- 0.7 lbs/inch (PSTC-131)

Tensile Strength:

TD 7 lbs/inch +/- 0.7 lbs/inch (PSTC-131)

Tack:

460 g/cm² (ASTMD2979-71, 1 sec. dwell)

Elongation:

MD 400% +/- 10% (PSTC-131)

TD 125% +/- 10% (PSTC-131)

Elevated Temperature Exposure:

After 24 hours at 160°F (70°C) there was no deterioration of the substrate

Dielectric Strength:

1900 Volts /mil (ASTM D149-09, Method A)

Flammability:

Average burn time less than 10 seconds (ASTM D1000)

UV Resistance:

*3000 hours no change observed (ASTM G154)

*3000 hours equates to 5 years of assimilated outdoor UV exposure.



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CHEMICAL/SOLVENT RESISTANCE:

Samples were dot matrix printed with Panduit PDLR ribbon, thermal transfer printed with RMH*BL/RMEH*BL and RMR*BL/RMER*BL ribbons, laser and inkjet printed. These samples were wrapped around a 1/12" OD wire in self-laminating format. Test was conducted at room temperature after 24 hour dwell. The samples were immersed in the specified chemical reagents for 5 immersions using the following cycle: a 10 minute immersion time followed by a 30 minute recovery time.

Chemical Reagent	Visual Observation				
	Substrate / Adhesive	Dot Matrix Printed Legend	Thermal Transfer Printed Legend	Laser Printed Legend	Inkjet Printed Legend
Distilled Water	No effect	No effect	No effect	No effect	No effect
Mineral Spirits	No effect	No effect	No effect	No effect	No effect
ASTM #3 Oil	No effect	No effect	No effect	No effect	No effect
Isopropyl Alcohol	No effect	No effect	No effect	No effect	No effect
Methanol	Slight adhesive bleed	No effect	No effect	No effect	No effect
3% Alconox Detergent	No effect	No effect	No effect	No effect	No effect
10% Sodium Hydroxide Solution	No effect	No effect	No effect	No effect	No effect
10% Sulfuric Acid Solution	No effect	No effect	No effect	No effect	No effect
5% Sodium Chloride Solution	No effect	No effect	No effect	No effect	No effect
Freon TF	No effect	No effect	No effect	No effect	No effect
Super Agitene	No effect	No effect	No effect	No effect	No effect
Jet-A Fuel	No effect	No effect	No effect	No effect	No effect
Arco TruSlide 68	No effect	No effect	No effect	No effect	No effect
SAE 30 Motor Oil	No effect	No effect	No effect	No effect	No effect



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TDS:
Effective Date:
Revision:

GMTD1
23JUL2013
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APPROVALS:

UL Recognized: UL 969
File Number: MH14979

CUL Recognized: C22.2 No. 0.15-01
File Number: MH 14979

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