

Technical Data Sheet**Self-Laminating Clear Polyvinylfluoride Film**

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

Part Number Prefixes		
TTSL	PDL	

Printable Material Suffixes		
TAT-A	TAD-A	TAJ-A

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2011/65/EU). Material is a self-extinguishing top coated polyvinylfluoride 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:	1.9 +/- 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:**PERFORMANCE:**

Peel Adhesion to Stainless Steel:	30 oz/in width (PSTC-101, 15 min. dwell) 40 oz/in width (PSTC-101, 72 hrs dwell)
Shear Adhesion:	20 hours (PSTC-107, Procedure A)
Tensile Strength:	MD 18 +/- 1.8 lbs./inch width (PSTC-131) TD 28 +/- 2.8 lbs./inch width (PSTC-131)
Elongation:	MD 110% +/- 10% (PSTC-131) TD 90% +/- 10% (PSTC-131)
UV Resistance:	*3000 hours no change observed (ASTM G154)
Elevated Temperature Exposure:	After 8 hours at 225°F (107°C) there was no deterioration of the substrate
Tack:	460 g/cm ² (ASTM D-2979-71, 1 sec dwell)

*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 dot matrix ribbon, thermal transfer printed with RMH*BL/RMEH*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	Adhesive bleed	No effect	No effect	No effect	No effect
3% Alconox Detergent	Slight adhesive bleed	No effect	No effect	No effect	No effect
10% Sodium Hydroxide Solution	Adhesive bleed	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
Blasogrind HC 5	No effect	No effect	No effect	No effect	No effect

Approvals

UL Recognized: UL969

File Number: MH14979 (TTSL, PDL, TAT-A, TAD-A TAJ-A)

CUL Recognized: C22.2 No. 0.15-15

File Number: MH14979 (PDL, TAD-A)

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