

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

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

Part Number Prefixes		
TTSL*		

Printable Material Suffixes		
VA1Y		
V*TY		
V*C		

**PRODUCT SPECIFICATIONS:**

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is a top coated vinyl 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 thermal transfer printing.
Adhesive:	Acrylic based, pressure sensitive adhesive.
Standard Colors:	Clear film with colored print-on area
Thickness:	3.2 +/- 0.4 mils (substrate and adhesive)
Service Temperature Range:	-50°F to 225°F (-45.6°C to 107°C)
Minimum Application Temperature:	50°F (10°C)
Storage Conditions:	Store at 70°F (21°C) and 50% Relative Humidity. For cassette products do not exceed 95°F.

**PROPERTIES:**

Peel Adhesion to Stainless Steel:	28 oz/in width minimum (PSTC-101, 15 min. dwell) 40 oz/in width minimum (PSTC-101, 24 hrs. dwell)
Shear Adhesion:	3 hours minimum (PSTC-107, Procedure A)
Tensile Strength:	MD 8 +/- 1.5 lbs./inch width (PSTC-131)
Elongation:	MD 150% +/- 10% (PSTC-131)
UV Resistance:	*3000 hours no change observed (ASTM G154)
Elevated Temperature Exposure	After 8 hours at 150°F (65.5°C) there was no deterioration of the substrate
Dielectric Strength:	2,133 Volts/Mil (ASTM D149-97, Method A)

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

**CHEMICAL/SOLVENT RESISTANCE:**

Samples were thermal transfer printed with RMH\*BL/RMEH\*BL ribbon printed on a Panduit TDP43MY/TDP43ME printer. 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

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minute recovery time.

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

**APPROVALS**

UL Recognized: UL969

File number: MH 14979

CUL Recognized: C22.2 No. 0.15-01

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