

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

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

Part Number Prefixes		
TTSL		TTSL*VC3-*-Y

Printable Material Suffixes		
VA1Y		
V*TY		
V*C		
VAA		

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is a self-extinguishing, 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:	Translucent film with colored print-on area
Thickness:	4.25 +/- 0.45 mils (substrate and adhesive)
Service Temperature Range:	-40°F to 150°F (-40°C to 66°C)
Minimum Application Temperature:	40°F (4.4°C)
Storage Conditions:	Store at 70°F (21°C) and 50% Relative Humidity.

PROPERTIES:

Peel Adhesion to Stainless Steel:

32 oz/in width (PSTC-101, 15 min. dwell)
45 oz/in width (PSTC-101, 24 hrs dwell)

Shear Adhesion:

24+ hours (PSTC-107, Procedure A)

Tensile Strength:

MD 3200 psi minimum (ASTM D882)
12.2 lbs./inch width minimum (PSTC-131)

Elongation:

MD 150% minimum (ASTM D882)
150% minimum (PSCT-131)

Elevated Temperature Exposure:

After 8 hours at 150°F (65.5°C) there was no deterioration of the Substrate.

Dielectric Strength:

1900 Volts/MIL (ASTM D-149-97, 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.

PERFORMANCE:

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CHEMICAL/SOLVENT RESISTANCE:

Samples were thermal transfer printed with RMR*BL/RMER*BL and RMH*BL/RMEH*BL ribbon. 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	Thermal Transfer Printed Legend
Distilled Water	No effect	No effect
Mineral Spirits	No effect	No effect
ASTM #3 Oil	Slight adhesive bleed	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	Slight adhesive bleed	No effect
Arco TruSlide 68	No effect	No effect
SAE 30 Motor Oil	No effect	No effect
Ethanol	No effect	No effect
Bleach	No effect	No effect
Gasoline	Adhesive bleed	No effect
Ethylene Glycol	No effect	No effect

Approvals

UL recognized: UL969 File Number: MH14979
 CUL recognized: C22.2 No. 0.15-01 File Number: MH14979
 UL recognized: UL2238 File Number: MH62615

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