

TDS: Effective Date: Revision:

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 intended for interior and exterior markings and 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:	PERFORMANCE:
Peel Adhesion to Stainless Steel:	32 oz/in width minimum (PSTC-1, 15 min. dwell)
Shear Adhesion:	3 hours minimum (PSTC-7, Procedure A)
Tensile Strength:	MD 8 +/- 1.5 lbs./inch width (PSTC-31)
Elongation:	MD 150% +/- 10% (PSTC-31)
UV Resistance:	3000 hours no change observed (ASTM G53)
Elevated Temperature Exposure:	After 8 hours at $150^{\circ}F(65.5^{\circ}C)$ there was no deterioration of the substrate





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CHEMICAL/SOLVENT RESISTANCE:

Samples were thermal transfer printed with RMH4BL 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.

	Visual Observation		
Chemical Reagent	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

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