

Technical Data Sheet**Dot Matrix Printable Polyester Film**

This specification is intended to outline the physical and chemical properties of *PANDUIT*'s pressure sensitive dot matrix printable polyester material and include the following part numbers and printable material identifiers:

Part Number Prefixes		
PDL		

Printable Material Suffixes		
YJD		

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is a top coated polyester film with a pressure sensitive adhesive. This material is halogen free.
Print Methods:	This material is recommended for dot matrix printing.
Adhesive:	Acrylic based, pressure sensitive permanent adhesive.
Standard Colors:	White and Silver
Thickness:	3.5 +/- 0.4 mils (substrate and adhesive)
Service Temperature Range:	-40°F to 311°F (-40°C to 154°C)
Minimum Application Temperature:	40°F (10°C)
Storage Conditions:	Store at 70°F (21°C) and 50% Relative Humidity.

PROPERTIES:**PERFORMANCE:**

Peel Adhesion to Stainless Steel:	45 oz/in width (PSTC-101, 15 min. dwell)
Shear Adhesion:	24+ hours (PSTC-107, Procedure A)
Tensile Strength:	MD 36 +/- 3.6 lbs./inch width (PSTC-131) TD 41 +/- 4.1 lbs./inch width (PSTC-131)
Elongation:	MD 80% +/- 15% (PSTC-131) TD 75% +/- 15% (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
Tack:	470 g/cm ² (ASTM D-2979-71)

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

Technical Data Sheet**CHEMICAL/SOLVENT RESISTANCE:**

Test performed according to PSTC-101, ASTM D-543-87 and ASTM D-896-90

The testing was conducted at room temperature and performed with reference to the above test methods.

Before testing, the sample was printed using the PDLR-113 ribbon. The samples were cut 1" wide and were applied to stainless steel panels and conditioned for 24 hours. The samples were then immersed in the specified reagents for 5 immersions using the following cycle: a 10 minute immersion time followed by a 30 minute recovery time. After the fifth immersion, the samples were conditioned for 24 hours before testing. Percent retention of performance was based on a 48 hour adhesion value of 83 oz/inch (silver) and 74 oz/inch (white).

Note: "PROP" is Percent Retention of Performance.

Chemical/Solvent	Visual Observation	PROP <i>Silver</i>	PROP <i>White</i>
Distilled Water	No effect	87%	98%
Mineral Spirits	No effect	81%	96%
Toluene	Slight adhesive bleed	80%	91%
Isopropyl Alcohol	No effect	81%	96%
Methanol	No effect	81%	91%
Acetone	Slight adhesive bleed	67%	87%
Methyl Ethyl Ketone	Slight adhesive bleed	69%	87%
1,1,1 Trichloroethane	No effect	83%	94%
Freon TF	No effect	79%	87%
Super Agitene	No effect	83%	90%
Jet-A Fuel	No effect	83%	89%
Arco TruSlide 68	No effect	79%	89%
SAE 30 Motor Oil	No effect	77%	102%

IMMERSION RESISTANCE:

Printed samples were applied to stainless steel panels and immersed in "Isopar 'L' and Isopar 'M' solutions to determine if the printing would smear or if the adhesive would degrade.

Immersion Time	Visual Changes
10 Minutes	None
30 Minutes	None
60 Minutes	None
24 Hours	None

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APPROVALS

UL Recognized
CSA Accepted:
C22.2 No 0.15-01File number: MH 14576
File number: MH14576**LIMITED WARRANTY**

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