

Technical Data Sheet

## Laser/Inkjet Printable Polyester Film

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

Part Number Prefixes		
LJSL*Y		
PLL		

Printable Material Suffixes		
Y*J		

**PRODUCT SPECIFICATIONS:**

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is top coated to provide a laser/inkjet printable surface. This material is halogen free.
Print Methods:	This material is recommended for laser and inkjet printing.
Adhesive:	Acrylic based, pressure sensitive permanent adhesive.
Standard Colors:	Clear with colored print-on area
Thickness:	2.0 +/- 0.3 mils (substrate and adhesive)
Service Temperature Range:	-65°F to 225°F (-54°C to 107°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:	35 oz/in width (PSTC-101, 15 min. dwell)
Shear Adhesion:	24+ hours (PSTC-107, Procedure A)
Tensile Strength:	MD 56lbs/ inch width +/- 15% (ASTM D882) TD 72 lbs/inch width +/- 15% (ASTM D882)
Elongation:	MD 160% +/- 15% (ASTM D882) TD 120% +/- 15% (ASTM D882)
Elevated Temperature Exposure:	After 8 hours at 275°F (135°C) there was no deterioration of the substrate
Tack:	470 g/cm <sup>2</sup> (ASTM D-2979-71, 1 sec dwell)
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

UV Resistance: \*3000 hours no change observed (ASTM G154)

\*3000 hours equates to 5 years of assimilated

Outdoor UV exposure.

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

Samples were laser and inkjet printed. These samples were laminated to flat steel panels and were also wrapped around a 1/12" OD wire. The test was conducted at room temperature after 24 hour dwell. 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 for samples on flat steel panels was based on a 48 hour adhesion value of 50 oz/inch width.

Chemical Reagent	Visual Observation	Print		Percent Retention of Performance
		Laser	Inkjet	
Distilled Water	No effect	No effect	No effect	98%
Mineral Spirits	No effect	No effect	No effect	96%
Toluene	Slight adhesive bleed	No effect	No effect	91%
Isopropyl alcohol	No effect	No effect	No effect	96%
Methanol	No effect	No effect	No effect	91%
Acetone	Slight adhesive bleed	No effect	No effect	87%
Methyl Ethyl Ketone	Slight adhesive bleed	No effect	No effect	87%
1,1,1 Trichloroethane	No effect	No effect	No effect	94%
Freon TF	No effect	No effect	No effect	87%
Super Agitene	No effect	No effect	No effect	90%
Jet A Fuel	No effect	No effect	No effect	90%
Arco Truslide 68	No effect	No effect	No effect	89%
SAE 30 Motor Oil	No effect	No effect	No effect	102%
10% Nitric Acid	No effect	No effect	No effect	92%

PSTC: Pressure Sensitive Tape Council (U.S.A.)  
ASTM: American Society for Testing and Materials (U.S.A.)

**Approval**

UL Recognized: UL969

File Number: MH14979 (for material suffix YAJ only)

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