

Technical Data Sheet

Thermal Transfer Printable Polyester Film

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

Part Number Prefixes		

Printable Material Suffixes		
YJM		

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 thermal transfer printing.
Adhesive:	Acrylic based pressure sensitive permanent adhesive.
Standard Colors:	White
Thickness:	2.8 +/- 0.4 mils (substrate and adhesive)
Service Temperature Range:	-40°F to 302°F (-40°C to 150°C) – Yellowing of material at prolonged higher temperatures but print remains legible, and label adhesive remains good.
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:	48 oz/in width minimum (PSTC-101, 15 min. dwell)
Shear Adhesion:	24+ hours (PSTC-107, Procedure A)
Tensile Strength:	MD 41 lbs./inch width minimum (PSTC-131) TD 41 lbs./inch width minimum (PSTC-131)
Elongation:	MD 85% minimum (PSTC-131) TD 75% minimum (PSTC-131)
Elevated Temperature Exposure:	After 8 hours at 150°F (65.5°C) there was no deterioration of the substrate
Tack:	3.8 lb/in (PSTC-11)
Short Term High Service Temperature:	5 minutes at 392F (200C) Some material shrinkage observed but print was good. Slight shrinkage of film observed, but no curling or yellowing of film observed.
Long Term High Service Temperature:	30 days at 212F (100C). No visible change observed.
Long Term Low Service Temperature:	30 days at -40F (-40C). No visible change observed.
Humidity Resistance:	30 days at 100F (37C) and 95% RH. No visible change observed.
UV Resistance	*3000 hours no change observed (ASTM G154)

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

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CHEMICAL/SOLVENT RESISTANCE:

The testing was conducted at room temperature. Separate sets were conditioned for 24 hours before being immersed in the following solvents for a period of 1 hour and 24 hours. After the samples were removed from the immersed solvents, they were rubbed 10 times with a lint free gauze. Visual observations were noted for any smear or loss of legibility.

1 Hour Immersion

Chemical/Solvent	Visual Observation
Jet Fuel	No change
Gasoline	Loss of print legibility
Methyl Ethyl Ketone	Loss of print legibility
409 Cleaner	No change
Alpha Flux 200L	No change

24 Hours Immersion

Chemical/Solvent	Visual Observation
Isopropyl Alcohol	Loss of print legibility
Water 150F	No change
Salt Water	No change
SAE 30 Motor Oil	No change
Hydraulic Fluid	No change
Skydrol	Loss of print legibility
Methanol/Water	No change
Ethylene Glycol	No change
ASTM #3 Oil	No change
Ethanol	Loss of print legibility

APPROVALS

UL Recognized: UL969 **Pending**File number: **Not Completed Yet**CUL Recognized: **Not Completed Yet**File number: **Not Completed Yet**

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