

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		
YKM-BK	BSM-WH	
BYM-WH	BUM-BK	
BWM-WH		
BQM-WH		

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2011/65/EU and Annex II (EU) 2015/863). Material is a top coated clear polyester film with optional/variable color layer and a pressure sensitive adhesive.
Print Methods:	This material is recommended for thermal transfer printing.
Adhesive:	Acrylic based, pressure sensitive permanent adhesive.
Standard Colors:	Clear, Black, Light Red, Light Blue, Light Green, Orange
Thickness:	Clear (*YKM-BK): 2.2 +/- 0.3 mils (substrate and adhesive) Other Colors: 2.8 +/- 0.3 mils (substrate and adhesive)
Service Temperature Range:	-40°F to 257°F (-40°C to 125°C)
Minimum Application Temperature:	59°F (15°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:	35 oz/in width (PSTC-101, 24 hour dwell)
Shear Adhesion:	24+ hours (PSTC-107, Procedure A)
Tensile Strength:	MD: 40 +/- 4.0 lbs./inch width (PSTC-131)
Elongation:	MD: 250% +/- 15% (PSTC-131)
UV Resistance:	*3000 hours no change observed, other than slight fading of colors. Print still legible. (ASTM G154)
Elevated Temperature Exposure:	After 24 hours at 160°F (71°C) there was no deterioration of the substrate
Tack:	8.58N (ASTM D-2979)
Short term low temperature exposure:	2 hours at -196C, no visible change observed
Short term high temperature exposure:	2 hours at 250C, Slight discoloration, printed text legible, no peeling/cracking
Abrasion Resistance:	Taber abraser, CS-10 wheels/250 gm. Wt/400 cycles, no visible change to substrate, complete removal of text (ASTM D4060)

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

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The testing was conducted at room temperature. Samples were thermal transfer printed on MP100/MP300 printers. 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	No change
Methyl Ethyl Ketone	Loss of print legibility
1:1:1 TCE	No change
Trichloroethylene	Loss of print legibility
409 Cleaner	No change
Alpha Flux 200L	No change

24 Hours Immersion

Chemical/Solvent	Visual Observation
Isopropyl Alcohol	No change
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

APPROVALS

UL Recognized: UL969

File number: MH 64185 (Clear, YKM-BK, only)

LIMITED WARRANTY

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