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Technical Data Sheet

Thermal Transfer Printable Polyolefin Film

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

Part Number Prefixes		
TCT-*PO		
TTC*POWH-C		

Printable Material Suffixes		
FJ6	FJM-BK	
FJC-BK	FJM	
FJC		
FJT		

PRODUCT SPECIFICATIONS:

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is a top coated polyolefin film with a pressure sensitive adhesive.
Print Methods:	This material is recommended for thermal transfer printing.
Adhesive:	Acrylic based, pressure sensitive permanent adhesive.
Standard Colors:	White opaque matte
Thickness:	4.2 +/- 0.5 mils (substrate and adhesive)
Service Temperature Range:	-40°F to 180°F (-40°C to 82°C)
Minimum Application Temperature:	-10°F (-23°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:	Minimum 30 oz/in width (PSTC-101, 15 min. dwell)
Shear Adhesion:	Minimum 2 hours (PSTC-107, Procedure A)
Tensile Strength:	MD: minimum 7500 PSI (PSTC-131) TD: minimum 13000 PSI (PSTC-131)
UV Resistance:	*3000 hours no change observed (ASTM G154). E
	Equates to 5 years of assimilated outdoor UV exposure
Elevated Temperature Exposure:	After 8 hours at 150°F (65.5°C) there was no deterioration of the substrate

CHEMICAL/SOLVENT RESISTANCE:

For Desktop-style rolls and LS8-style cassettes

The testing was conducted at room temperature. Samples were thermal transfer printed with Panduit RMR*BL/RMER*BL ribbon on the Panduit TDP43MY/TDP43ME printer. 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 for the immersed solvents, they were rubbed 10 times with a lint free gauze. Visual observations were noted for any smear or loss of legibility.

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1Hour Immersion

Chemical/Solvent	Visual Observation
Isopropyl Alcohol 50%	No change
Jet Fuel	No change
Gasoline	Loss of print legibility
Methyl Ethyl Ketone	Loss of print density
Trichloroethylene	No change
409 Cleaner	Loss of print legibility
Alpha Flux 200L	No change

24 Hours Immersion

Chemical/Solvent	Visual Observation
Isopropyl Alcohol 50%	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	Loss of print legibility
ASTM #3 Oil	Loss of print legibility

Approvals:
UL Recognized: UL969 File number: MH 14979
cUL Recognized: C22.2 No 0.15-01 File number: MH 14979

For MP-style Cassettes (Part Number Suffix = 'FJM and FJM-BK') -

Samples were printed with MP300 and MP100 portable thermal transfer 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 for 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
Isopropyl Alcohol 50%	No change
Jet Fuel	No change
Gasoline	Loss of print legibility
Methyl Ethyl Ketone	Loss of print density

24 Hours Immersion

Chemical/Solvent	Visual Observation
Isopropyl Alcohol 50%	No change
Water 150F	No change
Salt (5% Sodium Chloride) Water	No change
SAE 30 Motor Oil	No change
Hydraulic Fluid	No change
ASTM #3 Oil	Loss of print legibility

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