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TDS: GMPO4
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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		
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)
Elevated Temperature Exposure:	After 8 hours at 150°F (65.5°C) there was no deterioration of the substrate

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

CHEMICAL/SOLVENT RESISTANCE:

For Desktop-style rolls and LS8-style cassettes (everything except suffix "FJM") -

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.

1 Hour Immersion

Chemical/Solvent	Visual Observation
Jet Fuel	No change
Gasoline	Loss of print legibility
Methyl Ethyl Ketone	Loss of print density
1:1:1 TCE	No change
Trichloroethylene	No change
409 Cleaner	Loss of print legibility
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	Loss of print legibility
ASTM #3 Oil	Loss of print legibility

Approvals (everything except suffix "FJM") :

UL Recognized: UL969 **File Number: MH14979**

For MP-style Cassettes (Suffix = 'FJM') -

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
Jet Fuel	No change
Gasoline	Loss of print legibility
Methyl Ethyl Ketone	Loss of print density
1:1:1 TCE	No change

24 Hours Immersion

Chemical/Solvent	Visual Observation
Isopropyl Alcohol	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

Approvals (suffix = "FJM") :
NONE

LIMITED WARRANTY

All *PANDUIT* Identification Solution Products (except for Software programs) are warranted to be free from defects in material and workmanship at the time of sale but our obligation under this warranty is limited to replacement of the product proved to be defective within 6 months from the date of sale, or in the case of printers, within 90 days from the date of sale. This warranty is void if the products or printers are modified, altered or misused in any way. Use of *PANDUIT* printers with any product other than the specified *PANDUIT* products for which the printer was designed constitutes misuse. Before using, the user shall determine the suitability of the product for its intended use and user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be altered except by an agreement signed by officers or seller and manufacturer.

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