

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		
TTC*Y		
TC*Y		
(a) PLD-56		
(b) PLD-57		

Printable Material Suffixes		
YJT		
YJ6		
YJC		

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 (a) (b) Preprinted Colors
Thickness:	2.8 +/- 0.4 mils (substrate and adhesive)
Service Temperature Range:	-40°F to 302°F (-40°C to 150°C)
Minimum Application Temperature:	50°F (10°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:	48 oz/in width (PSTC-101, 15 min. dwell)
Shear Adhesion:	24+ hours (PSTC-107, Procedure A)
Tensile Strength:	MD 36 +/- 3.6 lbs./inch width (PSTC-131) TD 41 +/- 4.1 lbs./inch width (PSTC-131)
Elongation:	MD 80% +/- 15% (PSTC-131) TD 75% +/- 15% (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) and 210C. No visible change observed. At 230C, 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.**

Technical Data Sheet

CHEMICAL/SOLVENT RESISTANCE:

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 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
Ethanol	No change

APPROVALS

UL Recognized: UL969

File number: MH 14576 (except (a)),
MH 14979

CUL Recognized: C22.2 No 0.15-01

File number: MH 14979

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.

NEITHER *PANDUIT* OR SELLER SHALL BE LIABLE FOR ANY OTHER INJURY, LOSS OR DAMAGE, WHETHER DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR THE INABILITY TO USE THE PRODUCT OR THE PRINTER.

THIS WARRANTY IS MADE IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS OF PARTICULAR USE ARE SPECIFICALLY EXCLUDED.

The information contained in this literature is based on our experience to date and is believed to be reliable. It is intended as a guide or use by persons having technical skill at their own discretion and risk. We do not guarantee favorable results or assume any liability in connection with its use. Dimensions contained herein are for reference purposes only. This publication is not to be taken as a license to operate under, or a recommendation to infringe any existing patents. This supersedes and voids all previous literature, etc.