

**Technical Data Sheet**

## Thermal Transfer Printable Colored Vinyl Film

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

Part Number Prefixes		

Printable Material Suffixes		
V*C-BK	V*C-WH	VQ1Y
VV1Y	VY1Y	

*Rev***PRODUCT SPECIFICATIONS:**

Description:	Material is RoHS compliant (European Union directive 2002/95/EC). Material is a thermal transfer printable vinyl 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:	Blue, Green, Orange, Red, Purple, and Black
Thickness:	3.2+/- 0.4 mils (substrate and adhesive)
Service Temperature Range:	-50°F to 225°F (-45.6°C to 107°C)
Minimum Application Temperature:	40°F (4.4°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:	45 oz/in width minimum (PSTC-101, 15 min. dwell)
Elongation:	MD 120% minimum (PSTC-131)
Gloss:	Gloss at 60 degree angle shall be minimum 80 gloss units (GU) per ASTM D2457
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

*Rev***CHEMICAL/SOLVENT RESISTANCE:**

The testing was conducted at room temperature. Samples were thermal transfer printed with Panduit RMER4BL/ RMR11-BL (black) and RMER4WH/RMR11-WH (white) ribbons. 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.

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

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Rev

**1 Hour Immersion**

Chemical/Solvent	Visual Observation	
	Black ribbon	White ribbon
Jet Fuel	No change	No change
Gasoline	Loss of print legibility and adhesive bleed	No change
Methyl Ethyl Ketone	Material disintegrates	Material disintegrates
1:1:1 TCE	Loss of print legibility and adhesive bleed	Loss of print legibility and adhesive bleed
Trichloroethylene	Material disintegrates	Material disintegrates
409 Cleaner	No change	Loss of print density
Alpha Flux 200L	No change	No change

**24 Hours Immersion**

Chemical/Solvent	Visual Observation	
	Black ribbon	White ribbon
Isopropyl Alcohol	Loss of print density	Loss of print legibility
Water 150F	No change	No change
Salt water	No change	No change
SAE 30 Motor oil	No change	No change
Hydraulic Fluid	No change	No change
Skydrol	Material disintegrates	Material disintegrates
Methanol/Water	No change	No change
Ethylene Glycol	No change	No change
ASTM #3 Oil	No change	No change

PSTC: Pressure Sensitive Tape Council

ASTM: American Society for Testing and Materials

**Approvals:**

UL Recognized: UL969

CUL Recognized: C22.2 No. 0.15-01

File Number: MH 14979 (except VV1Y)

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