

Technical Data Sheet

Self Laminating Clear Polyvinylidene Fluoride Film

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

| Part Number Prefixes | | |
|----------------------|--|--|
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| Printable Material Suffixes | | |
|-----------------------------|--|--|
| T1T | | |
| T1J | | |
| T1D | | |
| | | |

PRODUCT SPECIFICATIONS:

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|----------------------------------|---|
| Description: | Material is RoHS compliant (European Union directive 2002/95/EC). Material is a self-extinguishing top coated polyvinylidene fluoride film with a pressure sensitive adhesive. This material is used in a self-laminating format for wire/cable marking. |
| Print Methods: | This material is recommended for dot matrix, thermal transfer, laser and inkjet printing. |
| Adhesive: | Acrylic based, pressure sensitive permanent adhesive. |
| Standard Colors: | Clear film with white print-on area |
| Thickness: | 1.8 +/- 0.3 mils (substrate and adhesive) |
| Service Temperature Range: | -65°F to 275°F (-53.9°C to 135°C) |
| Minimum Application Temperature: | 50°F (10°C) |
| Storage Conditions: | Store at 70°F (21°C) and 50% Relative Humidity. |

PROPERTIES:**PERFORMANCE:**

| | |
|-----------------------------------|---|
| Peel Adhesion to Stainless Steel: | 30 oz/in width (PSTC-101, 15 min. dwell) 66 oz/in width (PSTC-101, 72 hours dwell) |
| Shear Adhesion: | 24+ hours (PSTC-107, Procedure A) |
| Tensile Strength: | MD 7 lbs/inch +/-0.7 lbs/inch (PSTC-131) TD 7 lbs/inch +/-0.7 lbs/inch (PSTC-131) |
| Tack: | 460 g/cm ² (ASTMD2979-71, 1 sec. dwell) |
| Elongation: | MD 400% +/- 10% (PSTC-131) TD 125% +/- 10% (PSTC-131) |
| Elevated Temperature Exposure: | After 24 hours at 160°F (70°C) there was no deterioration of the substrate |
| Dielectric Strength: | 1900 Volts /mil (ASTM D149-09, Method A) |
| Flammability: | Average burn time less than 10 seconds (ASTM D1000) |
| UV Resistance: | *3000 hours no change observed (ASTM G154) |

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

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CHEMICAL/SOLVENT RESISTANCE:

Samples were dot matrix printed with Panduit PDLR ribbon, thermal transfer printed with RMH*BL/RMEH*BL and RMR*BL/RMER*BL ribbons, laser and inkjet printed. These samples were wrapped around a 1/12" OD wire in self-laminating format. Test was conducted at room temperature after 24 hour dwell. The samples were immersed in the specified chemical reagents for 5 immersions using the following cycle: a 10 minute immersion time followed by a 30 minute recovery time.

| Chemical Reagent | Visual Observation | | | | |
|-------------------------------|-----------------------|---------------------------|---------------------------------|----------------------|-----------------------|
| | Substrate / Adhesive | Dot Matrix Printed Legend | Thermal Transfer Printed Legend | Laser Printed Legend | Inkjet Printed Legend |
| Distilled Water | No effect | No effect | No effect | No effect | No effect |
| Mineral Spirits | No effect | No effect | No effect | No effect | No effect |
| ASTM #3 Oil | No effect | No effect | No effect | No effect | No effect |
| Isopropyl Alcohol | No effect | No effect | No effect | No effect | No effect |
| Methanol | Slight adhesive bleed | No effect | No effect | No effect | No effect |
| 3% Alconox Detergent | No effect | No effect | No effect | No effect | No effect |
| 10% Sodium Hydroxide Solution | No effect | No effect | No effect | No effect | No effect |
| 10% Sulfuric Acid Solution | No effect | No effect | No effect | No effect | No effect |
| 5% Sodium Chloride Solution | No effect | No effect | No effect | No effect | No effect |
| Freon TF | No effect | No effect | No effect | No effect | No effect |
| Super Agitene | No effect | No effect | No effect | No effect | No effect |
| Jet-A Fuel | No effect | No effect | No effect | No effect | No effect |
| Arco TruSlide 68 | No effect | No effect | No effect | No effect | No effect |
| SAE 30 Motor Oil | No effect | No effect | No effect | No effect | No effect |



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TDS:
Effective Date:
Revision:

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APPROVALS:

UL Recognized: UL 969
File Number: MH14979

CUL Recognized: C22.2 No. 0.15-01
File Number: MH 14979

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