



## **Technical Data Sheet**

**Description:** 

### **GENERAL**

**Print Technology:** Ink Jet **Material Type:** Translucent vinyl **Finish:** Provided in a self-laminated format with a white ink jet printable zone and a translucent overlaminating area. **Adhesive:** Permanent acrylic

#### **APPLICATIONS**

B-117 is an excellent material for wire and cable identification. This material has good clarity, conformability and is self-extinguishing. B-117 has outstanding water and oil resistance.

#### **INK RECOMMENDATIONS**

Hewlett Packard's 600 Series or newer black inks are recommended for use with this product.

#### **REGULATORY/AGENCY APPROVALS**

B-117 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

# Note- Due to past non-compliant B-117 materials in the market, only B-117 products with RoHS compliance statement on product packaging are RoHS compliant.

**Details:** 

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Total Thickness	0.0040 inch (0.102 mm)
Adhesion to:	ASTM D 1000	
-Stainless Steel	20 minute dwell 24 hour dwell	38 oz/in (42 N/100 mm) 49 oz/in (54 N/100 mm)
-Polypropylene	20 minute dwell 24 hour dwell	25 oz/in (28 N/100 mm) 33 oz/in (36 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack (1 second dwell, 1 cm/sec separation)	13.3 oz (378 g)
Drop Shear	PSTC-7 (except use 1/2" x 1" sample)	3.3 hours
Tensile Strength and Elongation	ASTM D 1000 -Machine -Cross	12 lbs/in (210 N/100 mm), 152% 11 lbs/in (193 N/100 mm), 195%
Flammability	ASTM D 1000 Average Burn Time	ABT less than 10 seconds

Performance Properties tested on B-117 printed with Hewlett Packard DeskJet 600C ink and wrapped around 0.080" OD TFE wire in self-laminating format.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS

High Service Temperature	30 days at 158°F (70°C)	No visible effect
Low Service Temperature	30 days at -40°F (-40°C)	No visible effect
	30 days at 100°F (37°C), 95% R.H.	No visible effect
	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	No visible effect

#### PERFORMANCE PROPERTIES CHEMICAL RESISTANCE

Samples were printed with Hewlett Packard 600C ink and wrapped around 0.080" OD TFE wire in self-laminating format. Test was conducted at room temperature after 24 hour dwell. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	SUBSTRATE/ADHESIVE	HP 600 SERIES INK
Cleaners and Solvents		
Isopropyl Alcohol	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect
Northwoods™ Buzz Saw Terpene	No visible effect	No visible effect
Cleaner		
Formula 409®	No visible effect	No visible effect
Deionized Water	No visible effect	No visible effect
Fuels, Oils and Lubricants		
Gasoline	Moderate unwrap	No visible effect
Brake Fluid	No visible effect	No visible effect
SAE 30 WT Oil at 70°C	No visible effect	No visible effect
Yellow 77® Wire Pulling Lubricant	No visible effect	No visible effect
Aerospace Related Fluids		
JP-8 Jet Fuel	No visible effect	No visible effect
Skydrol® 500B-4	Material destroyed	NA
MIL-H- 5606 Oil	No visible effect	No visible effect

B-117 is not recommended for use in harsh organic solvents such as methyl ethyl ketone, acetone, or 1,1,1-trichloroethane.

Product testing, customer feedback, and history of similar products, support a customerperformance expectation of at least *two years from the date of receipt* for this product as long as this product is stored in its original packaging in an environment *below 80 degrees F and 60% RH*. We are confident that our product will perform well beyond this time frame. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use, in their actual applications.

#### Trademarks:

ASTM: American Society for Testing and Materials (U.S.A.) Formula 409® is a registered trademark of the Chlorox Company Northwoods<sup>™</sup> is a trademark of the Superior Chemical Corporation PSTC: Pressure Sensitive Tape Council (U.S.A.) Polyken<sup>™</sup> is a trademark of Testing Machines Inc. SAE: Society of Automotive Engineers (U.S.A.) Skydrol® is a registered trademark of the Monsanto Company UL: Underwriters Laboratories Inc. (U.S.A.) Yellow 77® is a registered trademark of Ideal Industries, Inc.

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