Technical Data Sheet



TDS No. B-747 Effective Date: 21-Feb-2000

Description:

B-747 is a polyester film with an acrylic pressure sensitive adhesive and a printable coating specially formulated for laser printer and toners. B-747 is available in white or yellow.

B-747 is recommended for alphanumeric and barcode applications that require good solvent resistance and moderate to high temperature performance. This product works well on the topside of most circuit boards and IC's, as well as general labeling applications.

B-747 is formulated specially for laser printers. The material offers high print resolution, good solvent resistance, smudge resistance and moderate to high temperature performance.

B-747 white is a UL recognized component and CSA accepted material when printed with designated laser printers. See UL file MH17154 and CSA Acceptance Record LS 41833 for specific details.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	0.0026 inch (0.0660 mm) 0.0011 inch (0.0279 mm) 0.0037 inch (0.0940 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	46 oz/inch (50 N/100 mm) 56 oz/inch (61 N/100 mm) 9 oz/inch (10 N/100 mm)
-Textured ABS	20 minute dwell 24 hour dwell	16 oz/inch (18 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack (1 second dwell, 1 cm/sec separation)	17 oz (503 g)
Drop Shear	PSTC-7 (except use 1/2" x 1" sample)	22 hours
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction -Cross Direction	39 lbs/inch (683 N/100 mm), 77% 53 lbs/inch (928 N/100 mm), 65%
Dielectric Strength	ASTM D 1000	7000 volts

Performance Properties tested on B-747 samples laser printed with Hewlett Packard Laserjet III.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at 267 °F (130 °C)	No visible effect
Low Service Temperature	30 days at -40 °F (-40 °C)	No visible effect

PERFORMANCE PROPERTY		CHE	EMICAL RESISTANCE
Weatherability	ASTM G155, Cyc 30 days in Xenon Weatherometer		No visible effect
UV Light Resistance	30 days in UV Su	Inlighter™ 100	No visible ef fect
Humidity Resistance	30 days at 100 <i>°</i> F R.H.	(37℃), 95%	No visible effect

Samples printed with a Hewlett Packard Laserjet III printer. 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 period.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	APPEARANCE OF LABEL STOCK	APPEARANCE OF LASER PRINT
Methyl Ethyl Ketone	No visible effect	Print removed
1,1,1-Trichloroethane	No visible effect	Print removed
Toluene	No visible effect	Print removed
Freon® TMS	No visible effect	No visible effect
Isopropyl Alcohol	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect
JP-4 Jet Fuel	No visible effect	No visible effect
ASTM #3 Oil	No visible effect	No visible effect
Mil 5606 Oil	No visible effect	No visible effect
Skydrol® 500B-4	No visible effect	Print removed
Super Agitene®	No visible effect	No visible effect
Deionized Water	No visible effect	No visible effect
3% Alconox® Detergent	No visible effect	No visible effect
10% Sodium Hydroxide Solution	No visible effect	No visible effect
10% Sulfuric Acid Solution	No visible effect	No visible effect

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 (27 °C) 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:

Alconox® is a registered trademark of Alconox Co. Freon® is a registered trademark of Du Pont de Nemours, E.I. and Company. Lasertab® is a registered trademark of Brady Worldwide Inc. Polyken[™] is a trademark of Testing Machines Inc. Skydrol® is a registered trademark of the Monsanto Company Sunlighter[™] is a trademark of the Test Lab Apparatus Company Super Agitene® is a registered trademark of Graymills Corporation ASTM: American Society for Testing and Materials (U.S.A.) CSA: Canadian Standard Association PSTC: Pressure Sensitive Tape Council (U.S.A.) UL: Underwriters Laboratories Inc. (U.S.A.) All S.I. Units (metric) are mathematically derived from the U.S. Conventional

Units

Note: All values shown are averages and should not be used for specification purposes. Test data and test results contained in this document are for general information only and shall not be relied upon by Brady customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact Brady for further information.

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Specification Of LASERTAB® Laser Printable Labels

Application(s):	Circuit Board & Component ID, Through Hole - Top	
Size:	1.000" W x 0.250" H (25.400 mm W x 6.350 mm H)	
Sheet Size:	8.500" x 11.000" (215.9 mm x 279.4 mm)	
Printable Area:	1.000" W x 0.250" H (25.400 mm W x 6.350 mm H)	
Label Type/Style:	Label	
Horizontal Repeat:	1.100" (27.94 mm)	
Color:	White	
Finish:	Matte	
Qty Per Row:	7	
Material Type:	Polyester	
Material Description:	Permanent Polyester	
Brady Material #:	B-747	
After Process:	Yes, this material will work with this application	
Left Margin:	0.450" (11.43 mm)	
Printer Compatibility:	Laser Printers	
Qty Per Sheet:	266	
Surface Mount Technology:	No, this material does not work with this application	
Through Hole Technology:	Top: Yes. In extreme high temperatures, testing of this material is recommended, Bottom: No	
Top Margin:	0.875" (22.23 mm)	
	Compliant with RoHS Directive. NOTE: All statements concerning RoHS Directive compliance refer to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC. Product compliance is based upon information provided by suppliers of the raw materials used by Brady to manufacture these products, or by independent laboratory testing of these products. As such, Brady makes no independent representations or warranties, express or implied, and assumes no liability in connection with the use of this information.	
QTY/UOM:	10,000/Package	