

# **Technical Data Sheet**

#### BRADY B-424 THERMAL TRANSFER PRINTABLE WHITE PAPER LABEL STOCK

TDS No. B-424

Effective Date: 11/06/2009

Description: GENERAL

Print Technology: Thermal Transfer

Material Type: White Paper

Finish: Matte

Adhesive: Permanent Rubber

## **APPLICATIONS**

Low cost, general purpose labeling

# **RECOMMENDED RIBBONS**

Brady Series R4300 and R6100 black ribbons

Brady Series R4500 colored ribbons (red, blue, green)

## **REGULATORY**

Brady B-424 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

## **SPECIAL FEATURES**

Brady B-424 provides good contrast and smear resistance for thermal transfer and barcode printing.

## **Details:**

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	0.0030 inch (0.0762 mm) 0.0005 inch (0.0127 mm) 0.0035 inch (0.0889 mm)
Adhesion to: -Stainless Steel -Textured ABS -Polypropylene -Corrugated Cardboard	ASTM D 1000 20 minute dwell	Destroys upon removal from all listed surfaces.
Tack	ASTM D 2979 Polyken™ Probe Tack (1 second dwell, 1 cm/sec separation)	18 oz (500 g)
Drop Shear	PSTC-7 (except use 1/2" x 1" sample)	5 hours
Tensile Strength and Elongation	ASTM D 1000 -Machine	15 lbs/inch (N/100 mm), 10%

Performance properties tested on B-424 printed with Series R4300 and R6100 on BradyPrinter™ THT Model 203X thermal transfer printer. Printed samples of B-424 were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environmental conditions.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
Short Term High Service Temperature	5 minutes at 320°F (160°C)	No visible effect at 160°C, slight label discoloration at 180°C
Long Term High Service Temperature		No visible effect at 50°C, at 60°C label discolors slightly but still functional
Low Service Temperature	30 days at -40°F (-40°C)	No visible effect
Humidity Resistance	30 days at 100°F (37°C) and 95% R.H.	No visible effect
UV Light Resistance	30 days in UV Sunlighter™ 100	Label discolors slightly but still functional
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels, 500	
	g/arm (Fed. Std. 191A, Method 5306)	R4300: 50 cycles R6100: 40 cycles

1 of 2 10/12/2009 14:59

Product testing, customer feedback, and history of similar products, support a customer performance 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:

BradyPrinter™ is a trademark of Brady Worldwide, Inc.

Polyken™ is a trademark of Testing Machines Inc.

Sunlighter™ is a trademark of the Test Lab Apparatus Company

ASTM: American Society for Testing and Materials (U.S.A.)

PSTC: Pressure Sensitive Tape Council (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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2 of 2