

BRADY B-483 THERMAL TRANSFER PRINTABLE LABEL STOCK

TDS No. B-483

Effective Date: 28-Jul-2010

Description:

GENERAL

Print Technology: Thermal transfer Material Type: White Polyester

Finish: Glossy

Adhesive: Permanent Rubber Based

APPLICATIONS

B-483 is designed for high adhesion to textured metals and low surface energy plastics.

Print-On-Demand floor labels can be created using ToughStripe™ labels (B-483 colors overlaminated with B-634 clear polyester overlaminate). ToughStripe™ labels are designed for use in cartridge form with the GlobalMark® 2 and BMP™ 71 label printer.

RECOMMENDED RIBBONS

Brady Series R6000, R6000HF or R4900 black thermal transfer ribbons and Series R4400 colored thermal transfer ribbons.

REGULATORY/AGENCY APPROVALS

UL: B-483 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with Brady Series R6000 and Series R6000HF ribbons. See UL file MH17154 for specific details. UL information can be accessed on line at *UL.com*. Search in *Certifications* area. The Brady Series R4900 ribbon is also UL approved.

CSA: B-483 is CSA Accepted to C22.2 No.0.15-95 Adhesive Labels Standard when printed with Brady Series R6000 ribbon. See CSA file 041833 for specific details. CSA information can be accessed online at directories.csa-international.org.

Brady B-483 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

SPECIAL FEATURES

B-483 is specifically designed to adhere to powder coated surfaces.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000	
	-Substrate	0.0020 inch (0.051 mm)
	-Adhesive	0.0020 inch (0.051 mm)
	-Total	0.0040 inch (0.102 mm)
Adhesion to:	ASTM D 1000	
-Stainless Steel	20 minute dwell	155 oz/in (169 N/100 mm)
	24 hour dwell	160 oz/in (174 N/100 mm)
-Textured ABS	20 minute dwell	55 oz/in (60 N/100 mm)
	24 hour dwell	54 oz/in (59 N/100 mm)
-Polypropylene	20 minute dwell	140 oz/in (153 N/100 mm)
	24 hour dwell	143 oz/in (156 N/100 mm)

-Painted Enamel	20 minute dwell 24 hour dwell	144 oz/in (157 N/100 mm) 149 oz/in (162 N/100 mm)
-Powder Coated Metal	20 minute dwell 24 hour dwell	102 oz/in (111 N/100 mm) 104 oz/in (113 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 0.5 second dwell	39 oz (1122 g)

Performance properties tested on B-483 printed with Series R6000, R6000HF and R4900 ribbons. Printed samples of B-483 were laminated to aluminum before exposure to the indicated environmental condition. Results the same for both ribbons unless noted otherwise.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
Long Term High Service Temperature	30 days at 248 °F (120 °C)	No visible effect
Long Term Low Service Temperature	30 days at -40 °F (-40 °C)	No visible effect
Humidity Resistance	30 days at 100°F (37°C), 95% R.H.	No visible effect
UV Light Resistance	30 days in UV Sunlighter™ 100	No visible effect
Weatherability	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	No visible effect
Salt Fog Resistance	ASTM B 117 30 days in 5% salt fog solution chamber	No visible effect

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Samples printed with Series R6000, R6000HF and R4900 ribbons. Testing was conducted after 24 hour dwell. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

SUBJECTIVE OBSERVATION OF VISUAL CHANGE

		rub, slight print	rub, slight print	
		removal after rub	removal after rub	
Rust Veto® 342	No visible effect	No visible effect	No visible effect	Not Tested
		with or without rub	with or without rub	
Skydrol® 500B-4	No visible effect	Moderate print	No visible effect w/o	No visible effect w/o
		removal w/o rub,	rub, complete print	rub, severe print
		complete print	removal after rub	removal after rub
		removal with rub		
Super Agitene®	Slight adhesive	No visible effect	No visible effect	No visible effect
	ooze	with or without rub	with or without rub	with or without rub
Deionized Water	No visible effect	No visible effect	No visible effect	No visible effect
		with or without rub	with or without rub	with or without rub
3% Alconox®	No visible effect	No visible effect	No visible effect	No visible effect
Detergent		with or without rub	with or without	with or without
Northwoods™ Buzz	No visible effect	No visible effect	No visible effect	Not Tested
Saw Citrus				
Degreaser				

ToughStripe™ labels (B-483 colors overlaminated with B-634 clear polyester overlaminate) designed for use in cartridge form with the GlobalMark® 2 and BMP™ 71 label printers were tested in the following chemical reagents. Samples were allowed to dwell 24 hours at room temperature prior to testing. Dip testing consisted of 5 cycles of 10 minute immersions in the specified chemicals followed by 30 minute recovery periods. Samples were immersed in the chemical reagent for 7 days for the 7 day immersion test. Testing was conducted at room temperature.

CHEMICAL REAGENT	7 DAY IMMERSION	DIP TEST
30% Sulfuric Acid	NE	NE
10% Sulfuric Acid	NE	NE
30% Hydrochloric Acid	F	NE
10% Hydrochloric Acid	NE	NE
Glacial Acetic Acid	F	F
5% Acetic Acid	NE	NE
50% Sodium Hydroxide	F	F
10% Sodium Hydroxide	F	F
10% Ammonia	F	NE
5% Sodium Hypochlorite (bleach)	F	NE
10% Sodium Chloride	NE	NE
Methanol	F	NE
Isopropyl Alcohol	NE	NE
Heptane	F	NE
Mineral Spirits	F	F
Turpentine	F	NE
Diesel Fuel	NE	NE
Kerosene	F	NE
Gasoline	F	NE
ASTM #3 Oil	NE	NE
SAE 20 Oil	NE	NE
Alconox®	NE	NE
Water	NE	NE

NE = No Effect F = Failed

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* $(27\,^\circ\text{C})$ *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:

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

Alconox® is a registered trademark of Alconox Co.

All S.I. Units (metric) are mathematically derived from the U.S. Conventional

BMP™ 71 is a registered trademark of Brady Worldwide, Inc.

BradyPrinter™ is a trademark of Brady Worldwide, Inc.

CSA: Canadian Standards Association

Globalmark® is a registered trademark of Brady Worldwide, Inc.

Northwoods™ is a trademark of the Superior Chemical Corporation

Polyken[™] is a trademark of Testing Machines Inc.

Rust Veto® is a registered trademark of the E.F. Houghton & Co.

SAE: Society of Automotive Engineers (U.S.A.)

Skydrol® is a registered trademark of the Monsanto Company

Sunlighter™ is a trademark of the Test Lab Apparatus Company

Super Agitene ${\bf @}$ is a registered trademark of Graymills Corporation

ToughStripe[™] is a registered trademark of Brady Worldwide, Inc.

UL: Underwriters Laboratories, Inc.

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.

Product compliance information is based upon information provided by suppliers of the raw materials used by Brady to manufacture this product or based on results of testing using recognized analytical methods performed by a third party, independent laboratory. As such, Brady makes no independent representations or warranties, express or implied, and assumes no liability in connection with the use of this information.

WARRANTY

Brady products are sold with the understanding that the buyers will test them in actual use and determine for themselves their adaptability to their intended uses. Brady warrants to the buyers that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the product shown to Brady's satisfaction to have been defective at the time Brady sold it. This warranty does not extend to any persons obtaining the product from the buyers. This warranty is in lieu of any other warranty, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and of any other obligations or liability on Brady's part. Under no circumstances will Brady be liable for any loss, damage, expense, or consequential damages of any kind arising in connection with the use, or inability to use, Brady's products.

Specification Of Thermal Transfer Printable Labels

Application(s): General & Industrial Identification, General ID, General Identification, Panel

Identification, Voice/Data Identification

Agency CSA Approved, UL Recognized

Approval(s)/Compliance:

Size: 3.000" W x 2.000" H (76.200 mm W x 50.800 mm H)

Printable Area: 3.000" W x 2.000" H (76.200 mm W x 50.800 mm H)

Web Width: 3.200" (81.28 mm)

Label Type/Style: Label

Vertical Repeat: 2.125" (53.98 mm)

Color: White Finish: Gloss

Qty Per Row: 1

Material Type: Polyester

Material Description: Ultra Aggressive Polyester

Brady Material #: B-483

General ID Catalog: pg. 34

Recommended Ribbon 6000

Series:

Suggested Ribbon R6002

Part#:

Acceptable Ribbon 6200, 4900, 4400 (colors)

Series:

Printer Compatibility: BBP81, Brady 1244, Brady 1344, Brady 200MVP Plus, Brady 2461, Brady

300MVP Plus, Brady 300X-Plus II, Brady 3481, Brady 360X-Plus II, Brady 600X-Plus II, Brady 6441, Brady IP, Tagus T200, Tagus T300, Thermal Transfer

Surface: Highly Textured, Low Surface Energy, Powder Coated, Smooth,

Textured/Rough

Special Properties: Designed for powder coated surfaces, Ultra-aggressive adhesive

RoHS Compatibility: 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: 1,000/Roll