



### **Technical Data Sheet**

#### **BRADY B-488 MATTE WHITE POLYESTER LABEL STOCK**

TDS No. B-488

Effective Date: 03-Oct-2006

Description: GENERAL

**Print Technology:** Thermal transfer **Materials Type:** White polyester

Finish: Matte white

Adhesive: Permanent acrylic

#### **APPLICATIONS**

General and bar code labeling

#### RECOMMENDED RIBBONS

Brady series R4300 Brady series R6200

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

**UL:** B-488 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with Brady Series R4300 and R6200 ribbons. See UL file MH17154 for specific details. UL information can be accessed on line at *UL.com*. Search in *Certifications* area.

**CSA:** B-488 is CSA Accepted to C22.2 No.0.15-95 Adhesive Labels Standard when printed with Brady Series R4300 and R6000 ribbons. See CSA file 041833 for specific details. CSA information can be accessed online at directories.csa-international.org.

Brady B-488 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

# **SPECIAL FEATURES**

B-488 is designed to withstand numerous solvents and variable temperatures when applied to various surfaces including Stainless Steel and Polypropylene.

## Details:

TEST METHODS	AVERAGE RESULTS
ASTM D 1000	0.0036 inch (0.0914 mm)
ASTM D 1000	
20 minute dwell	41 oz/in (44.9 N/100 mm)
24 hour dwell	45 oz/in (52.5 N/100 mm)
20 minute dwell	27 oz/in (29.6 N/100 mm)
24 hour dwell	30 oz/in (32.8 N/100 mm)
20 minute dwell	8 oz/in (9.9 N/100 mm)
24 hour dwell	9 oz/in (10.9 N/100 mm)
20 minute dwell	35 oz/in (38.3 N/100 mm)
24 hour dwell	45 oz/in (51.4 N/100 mm)
ASTM D 2979	
Polyken™ Probe Tack	35.2 oz (1000 g)
1 second dwell	
ASTM D 1000	
- Machine direction	35 lbs/in (612 N/100 mm), 43%
Lowest application temperature	50°F (10°C)
	ASTM D 1000 20 minute dwell 24 hour dwell 24 hour dwell ASTM D 2979 Polyken™ Probe Tack 1 second dwell ASTM D 1000 - Machine direction

The following testing is performed with the B-488 printed with Brady R4300 & R6200 ribbons using a Brady 300X thermal transfer printer. All samples were allowed to dwell 24 hours prior to testing. Samples were tested on flat aluminum panels. Results are the same for both ribbons unless stated

1 of 4 09/12/2009 15:01

otherwise.

PERFORMANCE PROPERTIES	TEST METHODS	EFFECT TO TAPE	EFFECT TO PRINT
High Service Temperature	30 days at 320°F (160°C)	No visible effect at 145°C, slight yellowing at 160°C	No visible effect
Low Service Temperature	30 days at -40°F (-40°C)	No visible effect	No visible effect
Humidity Resistance	30 days at 100°F (37°C), 95% R.H.	No visible effect	No visible effect
UV Light Resistance	30 days in UV Sunlighter™ 100	No visible effect	No visible effect
Weatherability	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	No visible effect	No visible effect
Salt Fog Resistance	ASTM B 117 30 days in 5% Salt Fog Chamber	No visible effect	No visible effect
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels, 500 g/arm, 100 cycles (Fed. Std. 191A, Method 5306)	No visible effect	Print still legible after 100 cycles

PERFORMANCE PROPERTY CHEMICAL RESISTANCE
--

Samples were printed with R4300 ribbon using a Brady 300X printer, laminated to flat aluminum panels and allowed to dwell 24 hours prior to test. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical followed by 30 minute recovery periods. After the final immersion the flat samples were rubbed 10 times with cotton swabs. Testing was conducted at room temperature.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	EFFECT UPON IMMERSION	EFFECT AFTER COTTON SWAB RUB
Methyl Ethyl Ketone	No visible effect	Slight smear when rubbed
1,1,1-Trichloroethane	No visible effect	Moderate smear when rubbed
Toluene	No visible effect	Moderate smear when rubbed
Freon® TMS	No visible effect	Slight smear when rubbed
Isopropyl Alcohol	No visible effect	No visible effect
Mineral Spirits	No visible effect	Slight smear when rubbed
JP-8 Jet Fuel	No visible effect	Moderate smear when rubbed
ASTM #3 Oil	No visible effect	No visible effect
Mil 5606 Oil	No visible effect	No visible effect
Skydrol® 500B-4	No visible effect	Slight smear when rubbed
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

Samples were printed with R6200 ribbon using a Brady 300X printer, laminated to flat aluminum panels and allowed to dwell 24 hours prior to test. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical followed by 30 minute recovery periods. After the final immersion the flat samples were rubbed 10 times with cotton swabs. Testing was conducted at room temperature.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	EFFECT UPON IMMERSION	EFFECT AFTER COTTON SWAB RUB
Methyl Ethyl Ketone	No visible effect	Severe smear when rubbed
1,1,1-Trichloroethane	No visible effect	Slight smear when rubbed
Toluene	No visible effect	Moderate smear when rubbed

2 of 4 09/12/2009 15:01

Freon® TMS	No visible effect	Moderate smear when rubbed
Isopropyl Alcohol	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect
JP-8 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	Severe smear when rubbed
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 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

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 Standards Association

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.

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.

Copyright 2009 Brady Worldwide, Inc. | All Rights Reserved Material may not be reproduced or distributed in any form without written permission.

3 of 4 09/12/2009 15:01

Brady North America | 6555 W. Good Hope Rd | Milwaukee, WI 53223 | USA | Tel: 414-358-6600 | Fax: 800-292-2289

4 of 4