

**BRADY B-464 LABEL STOCK**

TDS No. B-464  
Effective Date: 02/21/2000

**Description:**

Brady B-464 is a silver retroreflective polyester material with a thermal transfer printable topcoat and a permanent acrylic adhesive.

Brady B-464 is recommended for warehouse identification as a barcode bin location label. The barcode scanning distance of this material is increased compared to non-reflective materials. The actual increase in distance is dependent on the bar width of the printed barcode.

Brady B-464 utilizes reflective lenses incorporated into the facestock to provide long distance barcode scanners, 8 to 40 feet, with the required reflectance light in order to read the barcode.

The actual distance is dependent on the bar width of the printed barcode, as well as lighting conditions and other site specific conditions.

Recommended ribbon is the Brady Series R6000 resin ribbon.

**Details:**

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	0.0048 inch (0.122 mm) 0.0010 inch (0.025 mm) 0.0058 inch (0.147 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	61 oz/in (67 N/100 mm) Destroys Upon Removal
-Polypropylene	20 minute dwell	Not Recommended for Low Surface Energy Films
Tack	ASTM D 2979 Polyken™ Probe Tack 1 second dwell	32 oz (921 g)
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction	23 lbs/in (402 N/100 mm), 42%

The following testing was performed on B-464 printed using a BradyPrinter™ THT 'X' Series printer and a Brady Series R6000 ribbon. Samples laminated to aluminum panels and allowed to dwell 24 hours prior to testing.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at 176°F (80°C)	No visible effect
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	Not recommended for outdoor use*
Weatherability	ASTM G155, Cycle 2 30 days in Xenon Arc Weatherometer	Not recommended for outdoor use*

\* Exposure to outdoor environmental conditions causes the facestock of this product to discolor. The rate at which the scanning distance and barcode readability decreases due to facestock discoloration is not known. Use of Brady B-639 overlaminates may decrease facestock discoloration when this product is used outdoors.

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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The following testing is performed with B-464 printed on BradyPrinter™ THT 'X' Series printer with the Brady Series R6000 ribbon. Samples laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing consisted of 5 cycles of 10 minute immersions in the specified chemicals followed by 30 minute recovery periods. After the final immersion the samples were rubbed with cotton swabs. Testing was conducted at room temperature.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE		
	APPEARANCE OF TAPE	APPEARANCE OF PRINT WITHOUT RUB	APPEARANCE OF PRINT WITH RUB
Methyl Ethyl Ketone	Slight adhesive ooze	Slight ink removal	Ink removed
1,1,1-Trichloroethane	Slight adhesive ooze	No visible effect	Ink removed
Toluene	Slight adhesive ooze	No visible effect	Ink removed
Isopropyl Alcohol	No visible effect	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect	No visible effect
JP-4 Jet Fuel	No visible effect	No visible effect	No visible effect
SAE 20 WT Oil	No visible effect	No visible effect	No visible effect
Mil 5606 Oil	No visible effect	No visible effect	No visible effect
Skydrol® 500B-4	Slight adhesive ooze	Severe ink removal	Ink removed
Super Agitene®	No visible effect	No visible effect	No visible effect
Deionized Water	No visible effect	No visible effect	No visible effect
3% Alconox® Detergent	No visible effect	No visible effect	No visible effect
10% Sodium Hydroxide Solution	No visible effect	No visible effect	No visible effect
10% Sulfuric Acid Solution	No visible effect	No visible effect	No visible effect

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°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.  
 BradyPrinter™ is a 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.)  
 SAE: Society of Automotive Engineers (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.

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