

**BRADY B-8221 MATTE WHITE POLYESTER TYRE LABEL**

TDS No. B-8221  
Effective Date: 03/07/2019

**Description:**

**GENERAL**

**Print Technology:** Thermal transfer

**Materials Type:** White polyester

**Finish:** Matte

**Adhesive:** Rubber-based pressure sensitive

**APPLICATIONS**

B-8221 is designed for tyre identification.

**RECOMMENDED RIBBONS**

Brady Series R8960

**REGULATORY APPROVALS**

For information on the Weee-RoHS compliance status for a Brady Product go to one of the following websites:

In Canada: [www.bradycanada.ca/weee-rohs](http://www.bradycanada.ca/weee-rohs)

In Europe: [www.bradyeurope.com/rohs](http://www.bradyeurope.com/rohs)

In Japan: [www.brady.co.jp/products/labelsuse/rohs](http://www.brady.co.jp/products/labelsuse/rohs)

All other regions: [www.bradyid.com/weee-rohs](http://www.bradyid.com/weee-rohs)

**SPECIAL FEATURES**

B-8221 is designed to withstand the harsh environment of vulcanization of passenger and light truck tyre environment. In addition, B-8221 is designed to have strong bond to a tyre, yet remained permanent after vulcanization.

**Details:**

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total (excluding liner)	0.1320 mm (0.0052 in) 0.0300 mm (0.0012 in) 0.1620 mm (0.0064 in)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	54 oz/ inch (59 N/ 100 mm) 61 oz/ inch (68 N/ 100 mm)
-ABS	20 minute dwell 24 hour dwell	53 oz/ inch (58 N/ 100 mm) 69 oz/ inch (77 N/ 100 mm)
-Polypropylene	20 minute dwell 24 hour dwell	54 oz/ inch (59 N/ 100 mm) 73 oz/ inch (81 N/ 100 mm)
Tensile Strength and Elongation	ASTM D 1000 Machine Direction	129 lbs/ in (2304 N/ 100 mm), 82%

Performance properties tested on B-8221 printed with the Brady Series R8960 ribbon. Printed samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environmental conditions.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at 130°C	No visible effect to print. Label turned slight yellowish. Label remained functional.
Low Service Temperature	30 days at -40°C	No visible effect.
Humidity Resistance	30 days at 37°C, 95% RH.	No visible effect.
UV Resistance	30 days in QUV.	No visible effect to print. Label turned slight yellowish. Label remained functional.

Abrasion Resistance	Fed. Std. 191A, Method 5306 Taber Abraser, CS-10 grinding wheels, 250g/ arm	Print has faded but still legible after 25 cycles.
Weatherability	ASTM G155 30 days in Xenon Arc Weatherometer	No visible effect.

<b>PERFORMANCE PROPERTY</b>	<b>CHEMICAL RESISTANCE</b>
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Samples were printed with the Brady Series R8960 ribbon. Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of 15-minute immersion in specified test fluid. After immersion, the samples were removed from the test fluid and the printed image rubbed 10 times with a cotton swab saturated with the test fluid.

<b>SUBJECTIVE OBSERVATION OF VISUAL CHANGE</b>		
<b>CHEMICAL REAGENT</b>	<b>EFFECT AFTER IMMERSION</b>	<b>EFFECT AFTER RUB</b>
Mineral Spirit	No visible effect	No visible effect.
Methyl Ethyl Ketone	Slight adhesive ooze. No visible effect to print.	Severe print removal
Toluene	No visible effect	No visible effect.
Deionized Water	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
3% Alconox® Detergent	No visible effect	No visible effect
Esso® SAE 40	No visible effect	No visible effect
Isopropyl Alcohol	No visible effect	No visible effect

**Shelf Life:**

Shelf life is 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° F (27° C) and 60% RH. It remains the responsibility of the user to assess the risk of using this product. We encourage customers to develop testing protocols that will qualify a product's fitness for use in their actual application.

**Trademarks:**

ASTM: American Society for Testing and Materials (U.S.A.)  
Alconox® is a registered trademark of Alconox Co.  
ESSO® is the registered trademark of Exxon Mobil Corporation

**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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