

**BRADY B-7470 BLACK THERMAL TRANSFER PRINTABLE POLYPROPYLENE**

TDS No. B-7470  
Effective Date: 1/13/23

**Description:**

**GENERAL**

**Print Technology:** Thermal transfer

**Material Type:** Polypropylene

**Finish:** Gloss

**Adhesive:** Permanent Rubber based adhesive

**APPLICATIONS**

B-7470 is designed to adhere to low surface energy materials.

**RECOMMENDED RIBBONS**

Brady Series R4400W

**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)

**Details:**

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 100 Substrate Adhesive Total thickness (excluding liner)	0.0020 inch (0.0508mm) 0.0020 inch (0.0508mm) 0.0040 inch (0.1016mm)
Tack	ASTM D2979 Polyken™ Probe Tack 0.5 second dwell, 1cm/sec separation	1260 g
Adhesion	ASTM D 1000	
-Stainless Steel	20 minute dwell, RT 72 hr dwell, RT	69 oz/in (76 N/100mm) 80 oz/in (88 N/100mm)
-Polypropylene	20 minute dwell, RT 72 hr dwell, RT	73 oz/in (80 N/100mm) 77 oz/in (84 N/100mm)
Drop Shear	PSTC-7 (1/2" x 1" sample)	>24 hours

Performance properties tested on B-7470 printed with the Brady Series R4400W ribbon.. Printed samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environments. Unless noted, results are the same for both ribbons.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
Short Term High Service Temperature	5 minutes at various temperatures	No visible effect to label at 130°C. Label shrinkage at 145°C;
High Service Temperature	30 days at various temperatures	No visible effect to label at 120°C.
Low Service Temperature	30 days at -40°C	No visible effect
Humidity Resistance	30 days at 100°F (37°C) and 95% relative humidity.	No visible effect
UV Light Resistance	ASTM G155, Cycle 1 (no spray) 30 days in Xenon test chamber	No visible effect
Weatherability	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	slight shrinkage and edge curl, label still functional

Salt Fog Resistance	ASTM B 117 30 days in 5% salt fog solution chamber	No visible effect
Abrasion Resistance	Taber Abraser, CS10 grinding wheels, 250 g/arm (Fed. Std. 191A, Method 5306)	Print legible after 100 cycles

<b>PERFORMANCE PROPERTY</b>	<b>CHEMICAL RESISTANCE</b>
-----------------------------	----------------------------

Samples printed with the R4400W Series ribbon. Tests were conducted after a 24 hour dwell. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After the final immersion, the printed samples were rubbed 10 times

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	EFFECT TO LABEL STOCK	R4400W
Methyl Ethyl Ketone	5	5
Toluene	5	5
Acetone	5	5
Mineral Spirits	1	1
JP8 Jet Fuel	2	2
DOT 3 Brake Fluid	4	4
SAE 20WT Oil @ RT	1	1
SAE 20WT Oil @ 70°C	1	1
Isopropyl Alcohol	1	1
Mil 5606 Oil	1	1
Skydrol 500B	5	5
Formula 409	1	1
DI Water	1	1
3% Alconox Solution	1	1
Northwoods Buzzsaw degreaser	1	1
Super Agitene	1	1
10% Sodium Hydroxide solution	1	1
10% Sulfuric Acid solution	1	1

**Rating Scale**

- 1 = No Visible Effect
- 2 = Sight smear or print removal
- 3 = Moderate smear or print removal (print still legible)
- 4 = Severe smear
- 5 = Complete print removal

**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.) PSTC:  
Pressure Sensitive Tape Council (U.S.A.)  
Polyken™ is a trademark of Testing Machines Inc.  
S. I.: International System of Units  
Alconox® is a registered trademark of Alconox Co.  
Northwoods™ is a trademark of the Superior Chemical Corporation  
SAE: Society of Automotive Engineers (U.S.A.)

**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 2023 Brady Worldwide, Inc. | All Rights Reserved  
Material may not be reproduced or distributed in any form without written permission.

---

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