

## B-8117 MATTE BLACK LABEL STOCK

TDS No. B-8117  
Effective Date: 11/16/2020

### Description:

#### GENERAL

**Print Technology:** Thermal transfer

**Materials Type:** Polyester

**Finish:** Matte black

**Adhesive:** Rubber based

#### APPLICATIONS

B-8117 is designed for general industrial identification.

#### RECOMMENDED RIBBONS

Brady Series R6800 series white ribbon

Brady Series RR224 white ribbon

Brady Series R4400W white (alternate ribbon)

#### REGULATORY/AGENCY APPROVALS

UL: B-8117 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with the Brady Series R6800, Brady Series RR224 and the Brady Series R4400W ribbons. See UL files MH25991 and MH17154 for specific details. UL information can be accessed online at UL.com in the Product iQ area.

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.bradyc.co.jp/products/labelsuse/rohs](http://www.bradyc.co.jp/products/labelsuse/rohs)

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

### Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	Substrate Adhesive Total (excluding liner)	0.0025 inch (0.0635 mm) 0.0010 inch (0.0254 mm) 0.0035 inch (0.0889mm)
Adhesion to:		
Stainless Steel	20 minute dwell 24 hour dwell	90 oz/in (98 N/100 mm) 93 oz/in (102 N/100 mm)
ABS	20 minute dwell 24 hour dwell	80 oz/in (87 N/100 mm) 86 oz/in (94 N/100 mm)
Polycarbonate	20 minute dwell 24 hour dwell	80 oz/in (87 N/100 mm) 86 oz/in (94 N/100)
Acrylic (PMMA)	20 minute dwell 24 hour dwell	80 oz/in (87 N/100 mm) 86 oz/in (94 N/100 mm)

Performance properties tested on B-8117 printed with the Brady Series R6800 and RR224 ribbons. 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
Long Term High Service Temperature	30 days at 248°F (120°C)	No Visible Effect
Low Service Temperature	30 days at -112°F (-80°C)	No Visible Effect
Humidity Resistance	30 days at 100°F (38°C), 95% R.H.	No Visible Effect
UV Light Resistance	ASTM G155, Cycle 1 (no spray) 1000 hours in Xenon test chamber	No Visible Effect
Weatherability	ASTM G155, Cycle 1 1000 hours in Xenon Arc Weather-Ometer®	No Visible Effect
Abrasion Resistance	Taber Abraser, CS10 grinding wheels, 250 g/arm (Fed. Std. 191A, Method 5306)	Legible after 50 cycles
Salt Fog Resistance	ASTM B117 30 days in 5% salt fog solution chamber	No Visible Effect

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Samples printed with the Brady Series R6800 and RR224 ribbons. Samples were laminated to aluminum panels and allowed to dwell for 24 hours prior to testing. Testing was conducted at room temperature unless otherwise noted and consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After final immersion, the samples were removed and the printed image rubbed 10 times with a cotton swab saturated with test fluid. The rating scale below shows the effect on the quality of the print for each sample.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE				
	EFFECT TO LABEL STOCK	EFFECTS TO PRINTED IMAGE			
		R6800		RR224	
		WITHOUT RUB	WITH RUB	WITHOUT RUB	WITH RUB
Acetone	No visible effect	1	5	1	5
Ethanol	No visible effect	1	1	1	1
Toluene	No visible effect	1	5	1	5
Isopropyl Alcohol	No visible effect	1	1	1	1
Mineral Spirits	No visible effect	1	1	1	1
Gasoline	No visible effect	1	1	1	1
JP8 Jet Fuel	Slight adhesive ooze	1	1	1	1

Brake Fluid DOT 3	No visible effect	1	3	1	3
Skydrol® 500B-4	No visible effect	1	5	1	5
SAE 20 WT Oil at 70°C	No visible effect	1	1	1	1
MIL 5606 Oil	No visible effect	1	1	1	1
Formula 409® Cleaner	No visible effect	1	1	1	1
Northwoods™ Buzz Saw Citrus Degreaser	No visible effect	1	1	1	1
Deionized Water	No visible effect	1	1	1	1

**Rating Scale:**

1= no visible effect

2= slight smear or print removal, detectable but minimal smear

3= moderate smear or print removal (print still legible)

4= severe smear or print removal (print illegible or just barely legible)

5= complete print and/or topcoat removal

NP= print removed prior to rub

**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:**

Northwoods™ is a trademark of the Superior Chemical Corporation.

Polyken™ is a trademark of Testing Machines Inc.

Skydrol® is a registered trademark of Monsanto Company.

Weather-Ometer® is a registered trademark of Atlas Material Testing Technology LLC

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

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

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

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.

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