

### **BRADY B-7593 DURABLE POLYESTER NAMEPLATE**

TDS No. B-7593

Effective Date: 02/04/2019

Description: GENERAL

Print Technology: Thermal transfer

Material Type: Polyester

Finish: Gloss

**Colors:** White, yellow, green, red, silver and black **Adhesive:** Permanent acrylic, foam backed

# **APPLICATIONS**

B-7593 durable polyester nameplate labels are designed for patch panel identification in identifying external push-buttons, switches, and internal connection points. B-7593 is also used as rating and serial plates using alphanumerics that require name plate quality

# RECOMMENDED RIBBONS

Brady Series R6000 Halogen Free

Brady Series R4400 (colors red, blue, green and white)

#### **REGULATORY APPROVALS**

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

In Canada: <a href="https://www.bradycanada.ca/weee-rohs">www.bradycanada.ca/weee-rohs</a>
In Europe: <a href="https://www.bradyeurope.com/rohs">www.bradyeurope.com/rohs</a>

In Japan: <a href="https://www.brady.co.jp/products/labelsuse/rohs">www.brady.co.jp/products/labelsuse/rohs</a>
All other regions: <a href="https://www.bradyid.com/weee-rohs">www.bradyid.com/weee-rohs</a>

## Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000	
	- Substrate	0.200 mm (0.0079 inch)
	- Foam tape	0.450 mm (0.0177 inch)
	- Total (excluding liner)	0.650 mm (0.0256 inch)
Adhesion to:	ASTM D 1000	
- Stainless Steel	20 minutes dwell	35 N/100 mm (32 oz/inch)
	24 hour dwell	98 N/100 mm (90 oz/inch)
- Smooth ABS	20 minutes dwell	96 N/100mm (88 oz/inch)
	24 hour dwell	147 N/100 mm (134 oz/inch)
- Powdercoated surface	20 minutes dwell	120 N/100mm (109 oz/inch)
	24 hour dwell	182 N/100 mm (166 oz/inch)
- Polyethylene	20 minutes dwell	142 N/100mm ( 130 oz/inch)
, ,	24 hour dwell	> 200 N/100 mm (> 200 oz/inch)
Drop Shear	PSTC-7 (except use 1/2" x 1" sample)	35 hours
Tack	ASTM D2979	468 g
	Polyken™ Probe Tack	
	(1 s dwell, 1 cm/s separation)	

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS White B-7593/R6000 Halogen Free	TYPICAL RESULTS Black B-7593/R4410W	TYPICAL RESULTS Silver B-7593/R6000 Halogen Free
High Service	1000 hours at 100°C	No visual effect	No visual effect	No visual effect
Temperature	(212°F)			
Low Service	1000 hours at -40°C	No visual effect	No visual effect	No visual effect

Temperature	(-40°F)			
Humidity Resistance	1000 hours at 37°C	No visual effect	No visual effect	No visual effect
	(100°F), 95% R.H.			
UV Light Resistance	1000 hours in Q-Sun	No visual effect	No visual effect	No visual effect
	Xe-1 test chamber			
Weatherability	1000 hours in QUV	No visual effect	No visual effect	No visual effect
	(ASTM G-53)			
Abrasion Resistance	Method 5306 US	Number of cycles until	Number of cycles until	Numbers of cycles until
	Federal test 191A CS 10	print is illegible	print is illegible	print is illegible
	+ 500 g/arm	175 cycles	75 cycles	175 cycles

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Samples were printed with the Brady Series R6000 Halogen Free ribbon and dwelled 24 hours prior to test. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

White B-7593 / R6000 Halogen Free		
CHEMICAL REAGENT	APPEARANCE OF THE PRINTING BEFORE RUBBING	APPEARANCE OF THE PRINTING AFTER RUBBING
Isopropyl alcohol	1	1
Methyl ethyl ketone	5	5
Alcohol Mix*	1	2
Gasoline	1	5
Diesel	1	1
Skydrol® 500B-4	1	5
Mil 5606 Oil	1	1
5% sodium hydroxide	1	1
10% Sulphuric Acid Solution	1	1
Deionized Water	1	1
10% Salt Water Solution	1	1
n-hexane	1	1
Iso-octane	1	1
Ethanol	1	1
ASTM#3 oil	1	1
Acetone	1	5

<sup>\*</sup> Alcohol Mix is 50% ethanol, 30% methanol, and 20% water by volume.

Samples printed with the Brady Series R4400 white ribbon and dwelled 24 hours prior to test. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

Black B-7593 / R4400W		
CHEMICAL REAGENT	APPEARANCE OF THE PRINTING BEFORE RUBBING	APPEARANCE OF THE PRINTING AFTER RUBBING
Isopropyl alcohol	1	5
Methyl ethyl ketone	NP	NP
Alcohol Mix*	1	1
Gasoline	1	5
Diesel	1	1
Skydrol® 500B-4	NP	NP
Mil 5606 Oil	1	1
5% sodium hydroxide	1	1
10% Sulphuric Acid Solution	1	1
Deionized Water	1	1
10% Salt Water Solution	1	1
n-hexane	1	1
Iso-octane	1	1
Ethanol	1	4
ASTM#3 oil	1	4
Acetone	NP	NP

<sup>\*</sup> Alcohol Mix is 50% ethanol, 30% methanol, and 20% water by volume.

### 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 legible 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:

ASTM: American Society for Testing and Materials (U.S.A.)
Polyken™ is a trademark of Testing Machines Inc.
S. I.: International System of Units
Skydrol® is a registered trademark of the Monsanto Company

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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#### WARRANTY

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