



Technical Data Sheet

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 alphanumeric characters 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: www.bradycanada.ca/weee-rohs

In Europe: www.bradyeurope.com/rohs

In Japan: www.brady.co.jp/products/labelsuse/rohs

All other regions: www.bradyid.com/weee-rohs

Details:

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

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS White B-7593/R 6000 Halogen Free	TYPICAL RESULTS Black B-7593/R 4410W	TYPICAL RESULTS Silver B-7593/R6000 Halogen Free
High Service Temperature	1000 hours at 100°C (212°F)	No visual effect	No visual effect	No visual effect
Low Service Temperature	1000 hours at -40°C (-40°F)	No visual effect	No visual effect	No visual effect
Humidity Resistance	1000 hours at 37°C (100°F), 95% R.H.	No visual effect	No visual effect	No visual effect
UV Light Resistance	1000 hours in Q-Sun Xe-1 test chamber	No visual effect	No visual effect	No visual effect
Weatherability	1000 hours in QUV (ASTM G-53)	No visual effect	No visual effect	No visual effect
Abrasion Resistance	Method 5306 US Federal test 191A CS 10 + 500 g/arm	Number of cycles until print is illegible 175 cycles	Number of cycles until print is illegible 75 cycles	Numbers of cycles until print is illegible 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

* 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

* 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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