

**B-8593 RAISED PANEL LABEL**

TDS No. B-8593  
Effective Date: 02/04/2019

**Description:**

**GENERAL**

**Print Technology:** Thermal Transfer

**Materials Type:** Polyester

**Finish:** Satin/ Glossy

**Colors:** Silver, White, Black, Green, Red, Yellow

**Adhesive:** Acrylic Pressure Sensitive

**RECOMMENDED RIBBONS**

Black ribbons Brady Series R4900 and R6000 are preferred.  
Alternative black ribbons are Brady Series R7961 and R7964.  
White ribbon Brady R4400 series may be used on black, red and green labels.

**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.bradycanada.ca/products/labelsuse/rohs](http://www.bradycanada.ca/products/labelsuse/rohs)

All other regions: [www.bradycanada.ca/weee-rohs](http://www.bradycanada.ca/weee-rohs)

**Details:**

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL RESULTS
Thickness	ASTM D1000 - Substrate - Foam Backed Adhesive - Total (excluding liner)	0.23 mm 0.50 mm 0.73 mm
Peel Adhesion to: - Stainless Steel	ASTM D1000  24 hour dwell	> 100 N/100mm (150 oz/in) (Residue was observed upon peel due to tearing of foam)
Drop Shear	PSTC-7 24 hour dwell	45 hours
Tack	ASTM D2979 0.5 second dwell	990 g

Environmental resistance performance properties were tested on B-8593 (silver) and were printed with the Brady Series R4900 and the Brady Series R6000 Halogen Free ribbons. Printed samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environment. Unless noted, results are the same for both ribbons.

PROPERTIES	TEST METHOD	TYPICAL RESULTS
Long Term High Service Temperature	1000 hours at 100°C	No visible effect. No functional defects observed.
UV Resistance	ASTM G154 1000 hours	Slight loss in gloss but no functional defects observed.
Weathering resistance	ASTM G155 1000 hours	Slight loss in gloss but no functional defects observed.

Samples were printed with the Brady Series R4900 and the Brady Series R6000 Halogen Free ribbons. Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of rubbing the printed images 10 cycles with a cotton swab saturated with the test fluid. A rating scale of 1 – 5 is used in the table below to show the print quality of the samples tested upon exposure to different chemicals.

Chemical	B-8593 (silver)		B-8593 (white)	
	R4900	R6000 Halogen Free	R4900	R6000 Halogen Free
IPA	2	1	2-3	1
Acetone	5	4-5	5	5
MEK	5	3-4	5	5
Hexane	1	1	1	1
Heptane	1	1	2	1
Ethanol	2	2	2	1
H <sub>2</sub> O	1	1	1	1
Diesel	1	1	1	1
10% NaCl	1	1	1	1
10% H <sub>2</sub> SO <sub>4</sub>	1	1	1	1
10% NaOH	1	1	1	1
Gasoline	2	1-2	2	1

Chemical	B-8593 (red, green, yellow, black) printed with ribbons indicated below:					
	Red		Green		Yellow	Black
	R4400	R6000 Halogen Free	R4400	R6000 Halogen Free	R6000 Halogen Free	R4400
IPA	2	1	1-2	1	1	2
Acetone	5	4-5	5	4-5	4-5	5
MEK	5	5	5	5	5	5
Hexane	1	1	1	1	1	1
Heptane	1	1	1	1	1	1
Ethanol	2	1	1-2	1	1	1-2
H <sub>2</sub> O	1	1	1	1	1	1
Diesel	1	1	1	1	1	1
10% NaCl	1	1	1	1	1	1
10% H <sub>2</sub> SO <sub>4</sub>	1	1	1	1	1	1
10% NaOH	1	1	1	1	1	1
Gasoline	2	1	2	1	1	2

**Rating scale:**

- 1 = No visible effect
- 2 = Slight print removal
- 3 = Moderate print removal
- 4 = Severe print removal
- 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:**

ANSI: American National Standards Institute (U.S.A.)  
PSTC: Pressure Sensitive Tape Council (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.

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