

BRADY B-7516 THERMAL TRANSFER PRINTABLE MATTE SILVER POLYESTER LABEL STOCK WITH A GENERAL PURPOSE PERMANENT ADHESIVE

TDS No. B-7516
Effective Date: 03/07/2019

Description:

GENERAL

Print Technology: Thermal transfer

Material Type: Polyester

Finish: Matte silver

Adhesive: Permanent acrylic

APPLICATIONS

Asset tracking, rating plates

RECOMMENDED RIBBONS

Brady Series R7961

Brady Series R7964

Brady Series R6000 Halogen Free (alternate if higher chemical resistance is required)

MINIMUM APPLICATION TEMPERATURE

5°C (41°F)

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 D1000 - Substrate - Adhesive - Total (excluding liner)	0.050 mm (0.002 inch) 0.019 mm (0.00075 inch) 0.069 mm (0.00275 inch)
Adhesion to:	ASTM D1000	
- Stainless Steel	20 minute dwell 24 hour dwell	28 N/100 mm (26 oz/inch) 64 N/100 mm (59 oz/inch)
- Polypropylene	20 minute dwell 24 hour dwell	26 N/100 mm (24 oz/inch) 27 N/100 mm (25 oz/inch)
- Smooth Acrylic Powder Coated Aluminium	20 minute dwell 24 hour dwell	37 N /100 mm (34 oz/inch) 37 N /100 mm (34 oz/inch)

Performance properties tested on B-7516 printed with the Brady Series R6000 Halogen Free, the Brady Series R7961 and the Brady Series R7964 thermal transfer ribbons. Printed samples of B-7516 were laminated to aluminium and allowed to dwell 24 hours before exposure to the indicated environmental conditions. Unless noted, results are the same for the tested ribbons.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at 120°C (302°F)	No visible effect
Low Service Temperature	30 days at -40°C (-40°F)	No visible effect
Humidity Resistance	30 days at 37°C (99°F), 95 % R.H.	No visible effect
UV Light Resistance	30 days in Xenon Test Chamber	No visible effect
Weatherability	ASTM G154 30 days in QUV	No visible effect
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels, 250 g/arm, 100 cycles (Fed.Std. 191A, method 5306)	R6000 Halogen free : No visible effect R7961: Complete print removal R7964: Slight print removal but print remains legible

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Samples were printed with the Brady Series R6000 Halogen Free, the Brady Series R7961 and the Brady Series R7964 thermal transfer ribbons. Printed samples were laminated to aluminium panels and allowed to dwell 24 hours prior to testing. Test conducted at room temperature. Testing consisted of a 30 minute immersion in the specified test fluid. After immersion the samples were rubbed 10 times with cotton swabs saturated with the test fluid.

CHEMICAL REAGENT	EFFECT TO LABEL STOCK	SUBJECTIVE OBSERVATION OF VISUAL CHANGE					
		EFFECTS TO PRINTED IMAGE					
		R6000 Halogen Free		R7961		R7964	
		WITHOUT RUB	WITH RUB	WITHOUT RUB	WITH RUB	WITHOUT RUB	WITH RUB
Isopropanol	No visible effect	1	2	1	2	1	1
N-hexane	No visible effect	1	1	1	1	1	1
Toluene	No visible effect	1	5	1	5	1	1
Deionized water	No visible effect	1	1	1	1	1	1
Acetone	No visible effect	1	5	1	5	5	5
Methyl Ethyl Ketone (MEK)	No visible effect	1	5	1	5	2	5
10% H ₂ SO ₄	No visible effect	1	1	1	1	1	1
5% NaOH	No visible effect	1	1	1	1	1	1
Skydrol® 500B-4	No visible effect	1	1	1	5	4	5
Ethanol	No visible effect	1	1	1	5	1	1
ASTM#3 oil	No visible effect	1	1	1	5	1	5
Diesel	No visible effect	1	1	1	1	1	1
Gasoline	No visible effect	1	1	1	5	1	1
DOT-4 brake fluid	No visible effect	1	5	2	5	1	5

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

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.)
 Skydrol® is a registered trademark of Solutia Inc.

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

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.