

BRADY B-7514 THERMAL TRANSFER PRINTABLE GLOSSY WHITE POLYESTER LABEL STOCK WITH A HIGH STRENGTH PERMANENT ADHESIVE

TDS No. B-7514
Effective Date: 11/18/2013

Description:

GENERAL

Print Technology: Thermal transfer
Material Type: Polyester
Finish: Glossy white
Adhesive: High strength permanent pressure sensitive acrylic adhesive

APPLICATIONS

Good overall adhesion to a wide variety of substrates, including low energy plastics.

RECOMMENDED RIBBONS

Brady series R6000 Halogen Free
Brady series R7961 and R7964 (alternates)

MINIMUM APPLICATION TEMPERATURE

5°C (41°F)

REGULATORY

Brady B-7514 is RoHS compliant to RoHS directive 2011/65/EU

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D1000 - Substrate - Adhesive - Total	0.050 mm (0.002 inch) 0.024 mm (0.001 inch) 0.074 mm (0.003 inch)
Adhesion to:	ASTM D1000	
- Stainless Steel	20 minute dwell 24 hour dwell	63 N/100 mm (58 oz/inch) 60 N/100 mm (55 oz/inch)
- Polypropylene	20 minute dwell 24 hour dwell	60 N/100 mm (55 oz/inch) 58 N/100 mm (53 oz/inch)
- Smooth Acrylic Powder Coated Aluminium	20 minute dwell 24 hour dwell	62 N/100 mm (57 oz/inch) 60 N /100 mm (55 oz/inch)

Performance properties tested on B-7514 printed with Brady Series R6000 Halogen Free, R7961 and R7964 thermal transfer ribbons. Printed samples of B-7514 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 150°C (302°F)	Moderate discoloration but label is still functional
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 Brady Series R6000 Halogen Free, R7961 and 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 30 minute immersions 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	1	1	2	1	1
N-hexane	No visible effect	1	1	1	1	1	1
Toluene	No visible effect	1	4	1	3	1	2
Deionized water	No visible effect	1	1	1	1	1	1
Acetone	No visible effect	1	5	1	4	4	5
Methyl Ethyl Ketone (MEK)	No visible effect	5	5	5	5	5	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	3	1	4	5	5
Ethanol	No visible effect	1	1	1	2	1	1
ASTM#3 oil	No visible effect	1	1	1	4	1	5
Diesel	No visible effect	1	1	1	1	1	1
Gasoline	No visible effect	1	1	1	2	1	1
DOT-4 brake fluid	No visible effect	1	2	1	3	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

Product testing, customer feedback and history of similar products support a customer performance expectation of at least 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. We are confident that our product will perform well beyond this time frame. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use in their actual applications.

Trademarks:

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