

# BRADY B-7655 THERMAL TRANSFER PRINTABLE SATIN METALLISED POLYESTER LABEL STOCK

TDS No. B-7655

Effective Date: 05/29/2015

Description: GENERAL

Print Technology: Thermal transfer

Material Type: Polyester Finish: Satin metallised

Adhesive: Permanent pressure sensitive acrylic adhesive

Applications:

Rating and serial plates using alphanumerics, barcodes, graphic symbols and logos

Recommended ribbons:

Brady series R7964

Brady series R6000 Halogen Free

Brady series R6000 Brady series R4900

Minimum application temperature:

10°C (50°F)

**ROHS Environmental Compliance** 

Brady B-7655 is RoHS compliant to RoHS directive 2011/65/EU

Details:

Physical properties:

PROPERTIES	TEST METHODS	AVERAGE RESULTS		
Thickness	ASTM D1000			
-Substrate		0.050 mm (0.002 inch)		
-Adhesive		0.020 mm (0.001 inch)		
-Total		0.070 mm (0.003 inch)		
Adhesion to:	ASTM D1000	1D1000		
-Stainless Steel	20 minute dwell	77 N/100 mm (70 oz/inch)		
	24 hour dwell	82 N/100 mm (75 oz/inch)		
-Polypropylene	20 minute dwell	46 N/100 mm (42 oz/inch)		
	24 hour dwell	74 N/100 mm (68 oz/inch)		
-Smooth ABS	20 minute dwell	68 N/100 mm (62 oz/inch)		
	24 hour dwell	87 N/100 mm (80 oz/inch)		
Tack	ASTM D2979	312 g (11 oz)		
	Polyken <sup>TM</sup> Probe Tack			
	(1 second dwell)			

#### Performance properties:

Performance properties tested on B-7655 printed with black ribbons R7964, R6000 and R4900 using the Bradyprinter<sup>TM</sup> THT Model 600X-Plus thermal transfer printer. Printed samples were laminated to aluminium and allowed to dwell 24 hours before exposure to the indicated environments. Unless noted, results are the same for the tested ribbons.

	TYPICAL RESULTS	
days at 120°C (248°F)	no visible effect	
days at -40°C (-40°F)	no visible effect	
days at 37 <sup>o</sup> C (99 <sup>o</sup> F), 95% R.H.	no visible effect	
days in UV Light Chamber	no visible effect	
TM G53	no visible effect	
da da	ays at -40°C (-40°F) ays at 37°C (99°F), 95% R.H. ays in UV Light Chamber	

	30 days in QUV	
Abrasion Resistance	Fed. Std. 191A, Method 5306	R4900: moderate print removal but print
	Taber Abraser, CS-10 grinding wheels, 250	remains legible
	g/arm, 100 cycles	R6000: no visible effect
		R7964: slight print removal but print remains
		legible

#### Chemical resistance:

Samples were printed with black ribbons R7964, R6000 Halogen Free, R6000 and R4900 using the Bradyprinter<sup>TM</sup> THT Model 600X-Plus thermal transfer printer. Printed samples were laminated to aluminium and allowed to dwell 24 hours prior to testing. Test conducted at room temperature except where noted. Testing consisted of 5 cycles of 10 minute immersions in the specified test fluid followed by a 30 minute recovery period. After final immersion the samples were rubbed 10 times with cotton swabs saturated with test fluid.

	SUBJECTIVE OBSERVATION OF VISUAL CHANGE					
CHEMICAL REAGENT	R7964	R4900	R6000	R6000 Halogen Free		
Isopropanol	No visible effect	No visible effect	No visible effect	No visible effect		
lso-octane	No visible effect	No visible effect	No visible effect	No visible effect		
N-hexane	No visible effect	No visible effect	No visible effect	No visible effect		
Toluene	Severe smear	Severe smear	Print gone	Print gone		
Deionized water	No visible effect	No visible effect	No visible effect	No visible effect		
10% NaCl	No visible effect	No visible effect	No visible effect	No visible effect		
Acetone	Severe smear	Print gone	Print gone	Print gone		
Methyl-Ethyl-Ketone (MEK)	Print gone before rub	Print gone before rub	Print gone	Print gone		
10% H <sub>2</sub> SO <sub>4</sub>	No visible effect	No visible effect	No visible effect	No visible effect		
Alcohol Mix*	No visible effect	No visible effect	No visible effect	No visible effect		
5% NaOH	No visible effect	No visible effect	No visible effect	No visible effect		
Skydrol® 500B-4	Moderate fading	Moderate fading	Slight fading	Slight fading		
Ethanol	No visible effect	No visible effect	No visible effect	Slight fading		
ASTM#3 oil	Slight fading	No visible effect	No visible effect	No visible effect		
Diesel	No visible effect	No visible effect	No visible effect	No visible effect		
Gasoline lead-free	No visible effect	No visible effect	No visible effect	No visible effect		
LHM brake fluid	No visible effect	No visible effect	No visible effect	No visible effect		
DOT-4 brake fluid	Severe smear	Slight fading	No visible effect	No visible effect		

<sup>\*</sup>Alcohol mix: 50% Ethyl alcohol, 30% Methyl alcohol, 20% deionized water

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:

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Note: All values shown are averages and should not be used for specification purposes.

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