

BRADY B-7566 THERMAL TRANSFER PRINTABLE TAMPER-EVIDENT CLEAR POLYESTER LABEL STOCK

TDS No. B-7566
Effective Date: 05/21/2014

Description:

GENERAL

Print Technology: Thermal Transfer

Material Type: Polyester

Finish: Gloss Clear

Adhesive: Tamper Indicating Acrylic

APPLICATIONS

Material that requires high performance and evidence of label removal.

RECOMMENDED RIBBONS

Brady series R6000, R6000HF, R6000 Halogen Free and R4400 colored (red, blue, and green)

REGULATORY/AGENCY APPROVALS

Brady B-7566 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

SPECIAL FEATURES

B-7566 is designed to leave a "VOID" footprint when the label is removed. In addition, a "VOID" pattern will appear on the top surface of the label in order to prevent it from being reused. Recommended 24 hour room temperature dwell before removal for full tamper evident performance. The adhesive nature of this product does not allow for repositioning and requires minimal handling in order to prevent prematurely exposed VOID pattern.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	0.0014 inch (0.036 mm) 0.0011 inch (0.028 mm) 0.0025 inch (0.064 mm)
Adhesion to:	ASTM D 1000	
-Stainless Steel	30 minute dwell	66 oz/in (72 N/100 mm)
-Aluminum	30 minute dwell	36 oz/in (39 N/100 mm)
-Glass	30 minute dwell	61 oz/in (67 N/100 mm)
-Smooth ABS	30 minute dwell	60 oz/in (65 N/100 mm)
-Textured ABS	30 minute dwell	19 oz/in (21 N/100 mm)
- Polypropylene	30 minute dwell	64 oz/in (70 N/100 mm)
- Painted enamel	30 minute dwell	59 oz/in (61 N/100 mm)
- Powder coated enamel	30 minute dwell	27 oz/in (29 N/100 mm)
Drop Shear	PSTC-7	19 hours*
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction	33 lbs/in (5.82 N/100 mm), 196%
Application Temperature	Lowest application temperature to stainless steel	39°F (4°C)

*minimum value

Tamper evident adhesive performance properties were tested on B-7566 laminated to the indicated surfaces, exposed to the indicated environments and removed from the environments prior to testing. The label was removed at a 135° angle with a peel rate of 90 in/min and the remaining VOID adhesive pattern on each surface was observed. Upon label removal, tamper evidency may not always be apparent on the surface to which the label was adhered. In most cases, the label is not reusable as the VOID pattern will be visible on the top surface of the label.

**SUBJECTIVE OBSERVATION OF ADHESIVE PERFORMANCE
(PERCENTAGE OF VOID PATTERN RETAINED)**

SURFACE TYPE	24 hours at 72°F (22°C)	30 days at 104°F (40°C)	30 days at -40°F (-40°C)	30 days at -94°F (-70°C)
Laminated to:				
-Stainless Steel	50%-75%	85%-100%	30%-75%	10%-25%
-Aluminum	15%-30%	5%-20%	40%-75%	0%-15%
-Glass	40%-50%	40%-65%	40%-50%	0%-15%
-Smooth ABS	60%-65%	85%-100%	85%-100%	80%-95%
- Textured ABS	20-30%	60%-80%	30%-55%	0%-15%
- Polypropylene	60%-75%	25%-40%	10%-20%	30%-45%
- Painted enamel	50%-60%	80%-100%	50%-80%	10%-25%
- Powder coated metal	75%-100%	85%-100%	50%-100%	0%-15%

Performance properties tested on B-7566 samples printed using Series R6000 and R6000HF thermal transfer ribbon. The labels were printed with alphanumeric and 3:1 ratio with 6 mil minimum X dimension barcode. Printed samples of B-7566 were laminated to aluminum before exposure to the indicated environmental condition.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
Long Term High Service Temperature	30 days at 175°F (80°C)	No visible effect
Long Term Low Service Temperature	30 days at -94°F (-70°C)	No visible effect
Humidity Resistance	30 days at 100°F (37°C), 95% R.H.	No visible effect
UV Light Resistance	30 days in UV Sunlighter™ 100	No visible effect
Weatherability	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	No visible effect to print, some loss of tamper evidence

This label material is not intended for continuous outdoor exposure

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Samples printed with Brady Series R6000, R6000 Halogen Free and R6000HF ribbons and then laminated to aluminum panels. Test was conducted at room temperature after 24 hour dwell. 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.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE				
	LABEL STOCK SUBSTRATE/ ADHESIVE	R6000 / R6000 Halogen Free EFFECTS OF IMMERSION	R6000 / R6000 Halogen Free COTTON SWAB RUBS	R6000HF EFFECTS OF IMMERSION	R6000HF COTTON SWAB RUBS
Methyl Ethyl Ketone	No visible effect	Moderate smear or print removal (print still legible)	Complete print and/or topcoat removal	Severe print and/or topcoat removal	Complete print and/or topcoat removal
Toluene	No visible effect	Severe smear or print removal (print illegible or just barely legible)	Complete print and/or topcoat removal	No visible effect	Complete print and/or topcoat removal
Isopropyl Alcohol	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
JP-8 Jet Fuel	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Gasoline	No visible effect	No visible effect	Complete print and/or topcoat removal	No visible effect	No visible effect
SAE 20 WT Oil	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Mil 5606 Oil	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Skydrol® 500B-4	No visible effect	Complete print and/or topcoat removal	Complete print and/or topcoat removal	Severe print and/or topcoat removal	Complete print and/or topcoat removal
Deionized Water	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
10% Sodium	No visible effect	Moderate smear or	Severe smear or	No visible effect	No visible effect

Hydroxide Solution		print removal (print still legible)	print removal (print illegible or just barely legible)		
10% Sulfuric Acid	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Northwoods™ Buzz Saw Cleaner	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Formula 409®	No visible effect	No visible effect	No visible effect	No visible effect	No visible effect
Acetone	No visible effect	No visible effect	Complete print and/or topcoat removal	Severe print and/or topcoat removal	Complete print and/or topcoat removal
Brake Fluid	No visible effect	No visible effect	Complete print and/or topcoat removal	No visible effect	Severe smear/print 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 degrees 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.

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 Sunlighter™ is a trademark of the Test Lab Apparatus Company
 ANSI: American National Standards Institute (U.S.A.)
 ASTM: American Society for Testing and Materials (U.S.A.)
 PSTC: Pressure Sensitive Tape Council (U.S.A.)
 SAE: Society of Automotive Engineers (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.

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