

**BRADY B-352 THERMAL TRANSFER PRINTABLE TAMPER-RESISTANT METALLIZED VINYL LABEL STOCK**

TDS No. B-352  
Effective Date: 16-Jun-2009

**Description:**

**GENERAL**

**Print Technology:** Thermal Transfer  
**Material Type:** Tamper-Resistant Metallized Vinyl  
**Finish:** Matte Silver  
**Adhesive:** Acrylic

**APPLICATIONS**

Rating and serial plates that require high performance and resistance to product tampering.

**RECOMMENDED RIBBONS**

Brady series R6000 black and R4400 colored (red, blue, and green)

**REGULATORY/AGENCY APPROVALS**

**UL:** B-352 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with Brady Series R6000 ribbon. See UL file MH17154 for specific details. UL information can be accessed on line at *UL.com*. Search in *Certifications* area.

Brady B-352 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

**SPECIAL FEATURES**

Brady B-352 is designed to fracture easily in order to show signs of product tampering and to prevent one-piece label removal. Use caution when removing from liner as material is fragile.

**Details:**

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Total	0.0029 inch (0.074 mm)
Adhesion to: -Stainless Steel -Polypropylene -Textured ABS -Smooth ABS -Aluminum -Glass -Textured Powder Coated Metal -Painted Enamel	ASTM D 1000 20 minute and 24 hour dwell	Label destroys upon removal after both 20 minutes and 24 hours from all test surfaces
Tensile Strength and Elongation	ASTM D 1000	9 lbs/in (165 N/100 mm), 4%
Application Temperature	Lowest application temperature to stainless steel	39°F (4°C)

Performance properties testing on B-352 samples printed using Series R6000 ribbon and a BradyPrinter™ THT Model 3000X Thermal Transfer Printer. The labels were printed with alphanumerics and 3:0 ratio with 6 mil minimum X dimension barcode. Printed samples of B-352 were laminated to aluminum before exposure to the indicated environmental condition.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at 176°F (80°C)	Slight discoloration of topcoat

Low Service Temperature	30 days at -40°F (-40°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

<b>PERFORMANCE PROPERTY</b>	<b>CHEMICAL RESISTANCE</b>
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Sample printed with a BradyPrinter™ THT Model 300X using Brady Series R6000 ribbon 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 chemicals followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swabs saturated in test fluids.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE		
	LABEL STOCK SUBSTRATE/ ADHESIVE	R6000 PRINTING EFFECTS OF IMMERSION	R6000 PRINTING COTTON SWAB RUBS
Methyl Ethyl Ketone	Label destroyed	Label destroyed	Label destroyed
1,1,1-Trichloroethane	Label destroyed	Label destroyed	Label destroyed
Toluene	Label destroyed	Label destroyed	Label destroyed
Isopropyl Alcohol	No visible effect	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect	No visible effect
JP-8 Jet Fuel	No visible effect	No visible effect	No visible effect
SAE 20 WT Oil	No visible effect	No visible effect	No visible effect
Mil 5606 Oil	No visible effect	No visible effect	No visible effect
Gasoline	No visible effect	No visible effect	No visible effect
Rust Veto® 342	No visible effect	No visible effect	No visible effect
Skydrol® 500B-4	No visible effect	Moderate smear/bleed/print removal	Ink removed
Super Agitene®	No visible effect	No visible effect	No visible effect
Deionized Water	No visible effect	No visible effect	No visible effect
3% Alconox® Detergent	No visible effect	No visible effect	No visible effect
10% Sodium Hydroxide Solution	Silver part of label gone (around edges)	No visible effect	No visible effect
10% Sulfuric Acid Solution	No visible effect	No visible effect	No visible effect

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 degrees 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:**

Alconox® is a registered trademark of Alconox Co.  
 BradyPrinter™ is a trademark of Brady Worldwide, Inc.  
 Polyken™ is a trademark of Testing Machines Inc.  
 Rust Veto® is a registered trademark of the E.F. Houghton & Co.  
 Skydrol® is a registered trademark of the Monsanto Company  
 Sunlighter™ is a trademark of the Test Lab Apparatus Company  
 Super Agitene® is a registered trademark of Graymills Corporation  
 ASTM: American Society for Testing and Materials (U.S.A.)  
 SAE: Society of Automotive Engineers (U.S.A.)  
 All S.I. units (metric) are mathematically derived from U.S. conventional

units.

**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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