

BRADY B-969 MATTE METALLIZED POLYESTER LABEL STOCK

TDS No. B-969
Effective Date: 11/05/2015

Description:

GENERAL

Print Technology: Dot matrix
Material Type: Metallized polyester
Finish: Matte
Adhesive: Permanent acrylic

APPLICATIONS

Brady B-969 is used primarily as an identification label or rating plate material. Brady B-969 has good smudge resistance, solvent resistance, and high temperature performance.

RECOMMENDED RIBBONS

Brady series R2000
Brady series R5000

REGULATORY/AGENCY APPROVALS

UL: B-969 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with designated printing inks as well as with the Brady Series 2000 and 5000 dot matrix ribbons. See UL file MH10939.

CSA: B-969 is CSA accepted when printed with designated printing inks as well as with the Brady Series 2000 and 5000 dot matrix ribbons. See CSA Acceptance Record LS 41833 for specific details.

B-969 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

Details:

| PHYSICAL PROPERTIES | TEST METHODS | AVERAGE RESULTS |
|----------------------------------|---|--|
| Thickness | ASTM D 1000 -Topcoat -Film -Adhesive -Total | 0.0008 inch (0.020 mm) 0.0020 inch (0.051 mm) 0.0020 inch (0.051 mm) 0.0048 inch (0.122 mm) |
| Adhesion to: -Stainless Steel | ASTM D 1000 20 minute dwell 24 hour dwell | 65 oz/inch (71 N/100 mm) 77 oz/inch (84 N/100 mm) |
| -Textured ABS | 20 minute dwell 24 hour dwell | 24 oz/inch (26 N/100 mm) 27 oz/inch (30 N/100 mm) |
| -Polypropylene | 20 minute dwell 24 hour dwell | 40 oz/inch (44 N/100 mm) 40 oz/inch (44 N/100 mm) |
| Tack | ASTM D 2979 Polyken™ Probe Tack (1 second dwell, 1 cm/sec separation) | 46 oz (1300 grams) |
| Tensile Strength and Elongation | ASTM D 1000 -Machine -Cross | 48 lbs/inch (841 N/100 mm), 95% 60 lbs/inch (1051 N/100 mm), 53% |
| Application Temperature | Lowest application temperature to stainless steel | 50°F (10°C) |

The following testing is performed with the B-969 printed with the Brady Series 2000 and 5000 ribbons. All samples allowed to dwell 24 hours prior to testing.

| PERFORMANCE PROPERTIES | TEST METHOD | TYPICAL RESULTS |
|--------------------------|--------------------------|---|
| High Service Temperature | 30 days at 293°F (145°C) | Slight topcoat discoloration at 145°C. No visible effect to Series 2000 or 5000 print. No discoloration at 120°C; label moderately discolored but functional at 160°C |

| | | |
|-------------------------|--|---|
| Low Service Temperature | 30 days at -94°F (-70°C) | No visible effect |
| H umidity Resistance | 30 days at 100°F (37°C) and 95% R.H. | No visible effect |
| UV Light Resistance | 30 days in UV Sunlighter™ 100 | Slight topcoat yellowing. Slight Series 2000 or 5000 print fade. |
| Weatherability | ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer | Slight topcoat blotchiness. Slight Series 2000 and 5000 print fade. |
| Abrasion Resistance | Taber Abraser, CS-10 grinding wheels, 500 g/arm (Fed. Std. 191A, Method 5306) | Series 2000 and 5000 print still legible after 1500 cycles. |

| | |
|-----------------------------|---------------------------|
| PERFORMANCE PROPERTY | SOLVENT RESISTANCE |
|-----------------------------|---------------------------|

Samples printed with Series 2000 and 5000 ribbons. Samples laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Test was 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, samples rubbed 10 times with cotton swab saturated with test fluid.

| CHEMICAL REAGENT | SUBJECTIVE OBSERVATION OF VISUAL CHANGE | | |
|--------------------------------|---|--|--|
| | APPEARANCE OF TAPE | APPEARANCE OF SERIES 2000 PRINT | APPEARANCE OF SERIES 5000 PRINT |
| Methyl Ethyl Ketone | Slight adhesive ooze, topcoat removed when rubbed | Print removed when rubbed | Print removed when rubbed |
| 1,1,1-Trichloroethane | Slight adhesive ooze | Print removed when rubbed | Print removed when rubbed |
| Isopropyl Alcohol | No visible effect | No visible effect | No visible effect |
| Mineral Spirits | No visible effect | No visible effect | No visible effect |
| JP-4 Jet Fuel | Slight adhesive ooze | 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 |
| Rust Veto® 377 | No visible effect | No visible effect | No visible effect |
| Speedi Cut 332 Cutting Oil | No visible effect | Slight print bleed, slight print smear when rubbed | Slight print bleed, slight print smear when rubbed |
| Gasoline | No visible effect | Print fade when rubbed | Print fade when rubbed |
| Skydrol® 500B-4 | Slight adhesive ooze, topcoat softened | Slight print bleed, severe print smear when rubbed | Slight print bleed, severe print smear when rubbed |
| 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 |
| Northwoods™ Buzz Saw Degreaser | 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° 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.
Northwoods™ is a trademark of the Superior Chemical Corporation.
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.)
CSA: Canadian Standards Association
SAE: Society of Automotive Engineers (U.S.A.)
UL: Underwriters Laboratories Inc. (U.S.A.)
All S.I. Units (metric) are mathematical derived from the 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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