Technical Data Sheet

BRADY B-619 MATTE WHITE POLYESTER LABEL STOCK

TDS No. B-619
Effective Date: 06/11/2009

Description:

GENERAL

Print Technology: Dot Matrx
Material Type: White Polyester
Finish: Matte
Adhesive: Permanent Acrylic

APPLICATIONS

General purpose high performance labels, barcode labels, and topside of printed circuit board and IC identification.

RECOMMENDED RIBBONS

Brady Series 2000 and 5000

REGULATORY/AGENCY APPROVALS

Brady B-619 is UL recognized and CSA accepted when printed with designated printing inks as well as with the Brady Series 2000 and 5000 dot matrix ribbons. See UL file MH10939 and CSA Acceptance Record LS41833 for specific details.

Brady B-619 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

SPECIAL FEATURES

Brady B-619 has good smudge resistance, solvent resistance, and high temperature performance.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Topcoat -Film -Adhesive -Total	0.0006 inch (0.015 mm) 0.0020 inch (0.051 mm) 0.0010 inch (0.025 mm) 0.0036 inch (0.091 mm)
Adhesion to: -Stainless Steel -Textured ABS -Polypropylene	ASTM D 1000 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell	46 oz/in (50 N/100 mm) 55 oz/in (60 N/100 mm) 8 oz/in (9 N/100 mm) 9 oz/in (10 N/100 mm) 26 oz/in (28 N/100 mm) 29 oz/in (32 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 1 second dwell	34 oz (970 g)
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction -Cross Direction	42 lbs/in (736 N/100 mm), 118% 52 lbs/in (911 N/100 mm), 72%
Dielectric Strength	ASTM D 1000	7000 volts
Application Temperature	Lowest application temperature to stainless steel	50ºF (10ºC)

The following testing is performed with the B-619 printed with the Brady Series 2000 and 5000 ribbons. All samples allowed to dwell 24 hours prior to testing.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at 293°F (145°C)	Very slight topcoat darkening at 145ºC; no visible effect to Series 2000 or 5000 print. No darkening at 120ºC. Label moderately discolored but functional at

		160ºC.
Low Service Temperature	30 days at -94°F (-70°C)	No visible effect at -70ºC
Humidity Resistance	30 days at 100°F (37°C), 95% R.H.	No visible effect
UV Light Resistance	30 days in UV Sunlighter™ 100	Very slight topcoat yellowing. No visible effect to Series 2000 or 5000 print.
Weatherability	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	Series 2000 and 5000 print fade. Print still legible.
Salt Fog Resistance	ASTM B 117 30 days in 5% salt fog solution chamber	No visible effect
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels, 500 g/arm (Fed. Std. 191A, Method 5306)	Series 2000 and 5000 print still legible after 400 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	Slight bleed, print removed when rubbed	Slight bleed, print removed when rubbed
1,1,1-Trichloroethane	Slight adhesive ooze	Slight print removed when rubbed	Slight print removed when rubbed
Isopropyl Alcohol	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
Speedi Kut Cutting Oil 332	No visible effect	Slight print bleed, slight print smear when rubbed	Slight print bleed, slight print smear when rubbed
Gasoline	No visible effect	No visible effect	No visible effect
Rust Veto® 377	No visible effect	No visible effect	No visible effect
Skydrol® 500B-4	Slight adhesive ooze, topcoat softened	Slight print bleed, slight print smear when rubbed	Slight print bleed, slight print smear when rubbed
Super Agitene®	No visible effect	No visible effect	No visible effect
Alphametals BIOACT® EC-7R™	Slight adhesive ooze	Slight print bleed, slight print smear when rubbed	Slight print bleed, slight print smear when rubbed
Deionized Water	No visible effect	No visible effect	No visible effect
3% Alconox® Detergent	No visible effect	No visible effect	No visible effect
Genesolve® 2004	Slight adhesive ooze	Slight print bleed, slight print smear when rubbed	Slight print bleed, slight print smear when rubbed
6% Alpha 2110 @ 70ºC	No visible effect	No visible effect	No visible effect

Product testing, customer feedback, and history of similar products, support a customerperformance 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.
BIOACT® is a registered trademark of Petroferm, Inc.
EC-7R™ is a trademark of Petroferm Inc.
Genesolve® is a registered trademark of Allied-Signal 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
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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 mathematically 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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