Technical Data Sheet

BRADY B-2000 SMART WIRE IDENTIFICATION LABEL

TDS No. B-2000
Effective Date: July 2021

Description:

GENERAL

Print Technology: Thermal Transfer
Material Type: White Opaque Vinyl with NFC Inlay
Finish: Matte
Adhesive: Permanent Acrylic
NFC Chip Memory: 144 bytes
Operation Frequency: 13.56 MHz

APPLICATIONS

B-2000 is an NFC-enabled label that interfaces with customized software to provide state of the art asset tracking and management. B-2000 is a proven fit for data center environments. It is conformable to a wide range of wire and cable diameters and is self-extinguishing. B-2000 has an operating temperature range of -80°C (-112°F) to 100°C (212°F).

RECOMMENDED RIBBONS

Brady Series R4300 black.

For information on the Weee-RoHS compliance status for a Brady Product go to one of the following websites:
In Canada: www.bradycanada.ca/weee-rohs
In Europe: www.bradyeurope.com/rohs
In Japan: www.brady.co.jp/products/labelsuse/rohs
All other regions: www.bradyid.com/weee-rohs

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Total Thickness	0.0040 inch (0.102mm)
Flammability	ASTM D 1000 Average Burn Time	ABT less than 10 seconds

Performance properties tested on B-2000 printed with Brady R4300 series black thermal transfer ribbon. Labels were applied to 0.080” (2.0 mm) and 0.30” (8.0 mm) OD TFE optical cable.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS	NFC FUNCTION
High Service Temperature	30 days at 212°F (100°C)	No visible effect at 158°F (70°C). Moderate discoloration at 212°F 100°C) but still functional.	Functional
Low Service Temperature	30 days at -112°F (-80°C)	No visible effect	Functional
Humidity Resistance	30 days at 100°F (38°C), 95% R.H.	No visible effect	Functional
UV Light Resistance	ASTM G155, Cycle 1, Dry 30 days in Q-Sun Xenon Test Chamber	No visible effect	Functional
Weatherability	ASTM G155, Cycle 1 30 days in Xenon arc Weather-Ometer®	No visible effect	Functional

Salt Fog	ASTM B117, 30 days in Corrosion Test Chamber	No visible effect	Functional

PERFORMANCE PROPERTIES	CHEMICAL RESISTANCE

Chemical resistance testing performed on B-2000 printed with Brady R4300 series black thermal transfer ribbon. Labels were applied to 0.080” (2.0 mm) and 0.30” (8.0 mm) OD TFE optical cable. Testing was conducted at room temperature after 24 hour dwell. Testing consisted of 5 cycles of a 10 minute immersion in the specified test fluid followed by a 30 minute recovery period. NFC function was evaluated after the final immersion cycle.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE		NFC FUNCTION
	LABEL	THT PRINT	
Cleaners and Solvents			
Isopropyl Alcohol	No visible effect	Slight Removal	Functional
Mineral Spirits	No visible effect	No visible effect	Functional
Northwoods™ Buzz Saw Terpene Cleaner	No visible effect	Slight Smear/Pilling	Functional
Formula 409®	No visible effect	No visible effect	Functional
Deionized Water	No visible effect	No visible effect	Functional
Fuels, Oils and Lubricants			
Yellow 77® Wire Pulling Lubricant	No visible effect	No visible effect	Functional

B-2000 is not recommended for use in harsh organic solvents such as methyl ethyl ketone, acetone, or 1,1,1-trichloroethane.

Shelf life is one year from the date of receipt for this product as long as this product is stored in its original packaging in an environment of 0-35°C (32-95°F) and 60% RH. It remains the responsibility of the user to assess the risk of using this product. We encourage customers to develop testing protocols that will qualify a product's fitness for use in their actual applications.

Trademarks:
ASTM: American Society for Testing and Materials (U.S.A)
Formula 409® is a registered trademark of the Clorox Company
Northwoods™ is a trademark of the Superior Chemical Corporation
Weather-Ometer® is a registered trademark of Atlas Material Testing Technology LLC
Yellow 77® is a registered trademark of Ideal Industries, Inc.

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.

WARRANTY
Brady products are sold with the understanding that the buyers will test them in actual use and determine for themselves their adaptability to their intended uses. Brady warrants to the buyers that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the product shown to Brady's satisfaction to have been defective at the time Brady sold it. This warranty does not extend to any persons obtaining the product from the buyers. This warranty is in lieu of any other warranty, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and of any other obligations or liability on Brady's part. Under no circumstances will Brady be liable for any loss, damage, expense, or consequential damages of any kind arising in connection with the use, or inability to use, Brady's products.