Technical Data Sheet

BRADY B-402 THERMAL TRANSFER PRINTABLE WHITE PAPER LABEL STOCK

TDS No. B-402
Effective Date: 05/16/2024

Description:

GENERAL
Print Technology: Thermal transfer
Material Type: Paper
Finish: White
Adhesive: Permanent acrylic

APPLICATIONS
General purpose labeling applications requiring a low cost label material.

RECOMMENDED RIBBONS
Brady Series R4300

REGULATORY APPROVALS
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 (excluding liner)	0.0035 inch (0.089 mm)
Adhesion to:	ASTM D 1000	
- Stainless Steel	20 minute dwell 24 hour dwell	Destroys upon renewal after 20 minutes and 24 hour dwell
- Textured ABS	20 minute dwell 24 hour dwell	34 oz/in (37 N/100 mm) 34 oz/in (37 N/100 mm)
- Polypropylene	20 minute dwell 24 hour dwell	Destroys upon removal after 20 minutes and 24 hour dwell
- Corrugated cardboard	20 minute dwell 24 hour dwell	Destroys upon removal after 20 minutes and 24 hour dwell *
Tack	ASTM D 2979 Polyken™ Probe Tack (0.5 second dwell)	32 oz (920 grams)
Drop Shear	PSTC-7	3 hours
Tensile Strength and Elongation	ASTM D 1000 - Machine Direction	32 lbs/inch (560 N/100 mm), 3%

* Removal of label results in top layer of cardboard being peeled off.

Performance properties were tested on B-402 printed with the Brady Series R4300 ribbon. Printed samples of B-402 were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environmental conditions.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
Short Term High Service Temperature	5 minutes at various temperatures	No visible effect at 140°C (284°F), at 180°C (350°F) label discolors slightly but still is functional.
Long Term High Service Temperature	30 days at various temperatures	No visible effect at 60°C (140°F), at 70°C (158°F) label discolors slightly but still is functional
Low Service Temperature	30 days at -80°C (-112°F)	No visible effect
Humidity Resistance	30 days at 100°F, 95% R.H.	No visible effect
UV Light Resistance	ASTM G155 cycle 1 (No Spray) 30 days in Xenon test chamber	Label discolors slightly
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels, 250 g/arm (Fed. Std. 191A, Method 5306)	Moderate print removal but print is legible after 50 cycles

Shelf Life:

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 below 80° F (27° C) 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:
Polyken™ is a trademark of Testing Machines Inc.
Sunlighter™ is a trademark of the Test Lab Apparatus Company
ASTM: American Society for Testing and Materials (U.S.A.)
PSTC: Pressure Sensitive Tape Council (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.

Product compliance information is based upon information provided by suppliers of the raw materials used by Brady to manufacture this product or based on results of testing using recognized analytical methods performed by a third party, independent laboratory. As such, Brady makes no independent representations or warranties, express or implied, and assumes no liability in connection with the use of this 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.