

BRADY B-111 SELF-WOUND POLYESTER OVERLAMINATE

TDS No. B-111
Effective Date: 02/05/2007

Description:

GENERAL

Print Technology: n/a
Material Type: Clear Polyester
Finish: Glossy Clear
Adhesive: Acrylic

APPLICATIONS

Brady B-111 is used as a protective overlaminate. B-111 in a 2-ply put up can be used for paint masking or other similar applications in which the topside overlaminate is removed and the bottomside overlaminate remains.

REGULATORY APPROVALS

Brady B-111 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

SPECIAL FEATURES

B-111 is supplied in self-wound format to be used with Brady Protector™ laminator which prints, overlaminates, and diecuts labels. B-111 has a topside silicone release which provides easy unwinding of self-wound rolls. Brady B-111 is recommended for use with most standard Brady label materials. B-111 has excellent clarity, as well as very good temperature resistance, chemical resistance and abrasion resistance.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Film -Adhesive -Total	0.0010 inch (0.025 mm) 0.0010 inch (0.025 mm) 0.0020 inch (0.050 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell	24 oz/in (26 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 1 second dwell	17.6 oz (500g)
Release force of B-111 adhesive from B-111 topside silicone release	PSTC-1	0.39 oz/in (11 grams/25.4 mm)
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction	26 lbs/in (455 N/100 mm), 110%
Abrasion Test	Taber Abraser, CS-17 grinding wheels, 1000 g/arm (Fed. Std. 191A, Method 5306)	Material worn through in one or more spots at 700-1000 cycles
Application Temperature	Lower application temperature	40°F (5°C)

B-111 samples for Performance Properties were tested applied directly to aluminum panels and overlaminated over Brady B-423 white polyester. Samples allowed to dwell 24 hours at room temperature prior to testing.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
Long Term High Service Temperature	30 days at 230°F (110°C)	No visible effect at 100°C. Very slight discoloration at 110°C. Slight discoloration and blistering at 130°C but still functional.
Long Term Low Service Temperature	30 days at -94°F (-70°C)	No visible effect at -70°C
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	Very slight discoloration
Salt Fog Resistance	ASTM B 117	No visible effect

	30 days in 5% salt fog solution chamber	
Paint Mask Simulation	1 hour at 392°F (200°C) Heated in 2 ply put-up and then topside overlaminated removed	No visible effect at 320°F (160°C). 2 ply paint mask performed acceptably up to 392°F (200°C) but slight film shrinkage occurred.
PERFORMANCE PROPERTY		CHEMICAL RESISTANCE

Samples were tested overlaminated over Brady B-423 white polyester. Samples allowed to dwell 24 hours at room temperature prior to testing. Testing consisted of 5 cycles of 10 minute immersions in the specified chemicals followed by 30 minute recovery periods. Except where noted otherwise, testing was conducted at room temperature.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE
Methyl Ethyl Ketone	Slight adhesive ooze
1,1,1-Trichloroethane	Slight adhesive ooze
Isopropyl Alcohol	No visible effect
Gasoline	Severe adhesive ooze
SAE 20 WT Oil @70°C	No visible effect
Brake Fluid	No visible effect
Ethylene Glycol	No visible effect
Northwoods™ Buzz Saw Citrus Degreaser	No visible effect
Speedi Kut Cutting Oil 332	No visible effect
Skydrol® 500B-4	Slight adhesive ooze
JP-8 Jet Fuel	No visible effect
5% Alconox® Detergent	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.
- Brady Protector™ is a trademark of Brady Worldwide, Inc.
- Northwoods™ is a trademark of the Superior Chemical Corporation.
- Polyken™ is a trademark of Testing Machines Inc.
- Skydrol® is a registered trademark of the Monsanto Company
- 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.)
- SAE: Society of Automotive Engineers (U.S.A.)

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.

Material may not be reproduced or distributed in any form without written permission.

Brady North America | 6555 W. Good Hope Rd | Milwaukee, WI 53223 | USA | Tel: 414-358-6600 | Fax: 800-292-2289