BRADY B-103 CLEAR POLYESTER OVERLAMINATING TAPE

TDS No. B-103
Effective Date: 01/23/2019

Description:

GENERAL

Material Type: Clear Polyester (1 mil film)
Finish: Glossy
Adhesive: Permanent Acrylic

APPLICATIONS

Brady B-103 is recommended for use as a clear protective overlaminate for most standard Brady label materials.

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

SPECIAL FEATURES

B-103 can be supplied self-wound for in-line overlaminating operations, or provided on a carrier liner.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Film -Adhesive -Total	 0.0010 inch (0.025 mm) 0.0015 inch (0.038 mm) 0.0025 inch (0.063 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	 39 oz/in (43 N/100 mm) 42 oz/in (46 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 0.5 second dwell	14 oz (400 g)
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction	23 lbs/in (403 N/100 mm), 55%
Dielectric Strength	ASTM D 1000	5000 volts
Abrasion Test	Taber Abraser, CS-10 grinding wheels, 1000 g/arm (Fed. Std. 191A, Method 5306)	Material worn though at 3000 cycles
Application Temperature	Lower application temperature to stainless steel	50°F (10°C)

B-103 samples for Performance Properties were tested applied directly to aluminum panels and overlaminated over Brady B-619 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 various temperatures	Slight adhesive yellowing at 130°C, no visible effect at 110°C
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	 No visible effect
Salt Fog Resistance	ASTM B 117 30 days in 5% salt fog solution chamber	 No visible effect

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE

Samples were tested applied directly to aluminum panels and overlaminated over Brady B-619 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. 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
JP-4 Jet Fuel	Slight adhesive ooze
SAE 20 WT Oil	No visible effect
Mil-H-5606 Oil	No visible effect
Speedi Kut Cutting Oil 332	No visible effect
Gasoline	Slight adhesive ooze
Skydrol® 500B-4	Slight edge lift
Super Agitene®	No visible effect
BIOACT® EC-7R™ Terpene Cleaner	Slight adhesive ooze
Deionized Water	No visible effect
3% Alconox® Detergent	No visible effect
10% Sodium Hydroxide Solution	No visible effect
10% Sulfuric Acid Solution	No visible effect
6% Alpha 2110 at 70°C	No visible effect

Shelf life is 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° 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 application.

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.
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
Super Agitene® is a registered trademark of Graymills Corporation
ASTM: American Society for Testing and Materials (U.S.A.)
SAE: Society of Automotive Engineers (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.