

B-649 CLEAR CAST PVC OVERLAMINATE TAPE

TDS No. B-649
Effective Date: 01/21/2019

Description:

GENERAL

Print Technology: None
Material Type: Clear Polyvinyl Chloride
Finish: Gloss
Adhesive: Permanent Acrylic

APPLICATIONS

Brady B-649 is used as an overlaminate for labels where resistance to UV light and weathering is needed.

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)	0.0026 inch (0.066 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 72 hour dwell	48 oz/in (52 N/100 mm) 63 oz/in (66 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 1 second dwell	18.4 oz (522 g)
Tensile Strength and Elongation	ASTM D 882 -Machine Direction	5 lbs/in (5 N/100 mm), 115 %
Application Temperature	Lowest application temperature to stainless steel	50°F (10°C)
Abrasion Test	Taber Abraser, CS-10 grinding wheels, 1000 g/arm (Fed. Std. 191A, Method 5306)	Material worn through at 1000 cycles

B-649 samples for Performance Properties were tested applied directly to aluminum panels and overlaminated on Brady B-423 white polyester and Brady B-580 white polyvinyl chloride labels. Samples allowed to dwell 24 hours at room temperature prior to testing.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High Service Temperature	30 days at various temperatures	No visible at 70°C. Slight yellowing at 80°C. At 100°C moderate yellowing but still functional.
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
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
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Samples were tested applied directly to aluminum panels and overlaminated on Brady B-423 white polyester and Brady B-580

white polyvinyl chloride labels. 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 unless noted.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE
Isopropyl Alcohol	No visible effect
Mineral Spirits	No visible effect
MIL-H-5606 Oil	No visible effect
JP-8 Jet Fuel	No visible effect
SAE 20 WT Oil @ 70°C	No visible effect
Gasoline	Moderate adhesive ooze
Glass Cleaner	No visible effect
Northwoods™ Buzz Saw Citrus Degreaser	No visible effect
3% Alconox® Detergent	No visible effect
Deionized Water	No visible effect
Skydrol® 500B-4	Overlamine degraded and B-580 damaged.
10% Sulfuric Acid Solution	No visible effect
10% Sodium Hydroxide Solution	No visible effect

B-649 is not recommended for use in harsh organic solvents such as methyl ethyl ketone, acetone, or 1,1,1-trichloroethane.

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 application.

Trademarks:

Alconox® is a registered trademark of Alconox Co.
 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
 ASTM: American Society for Testing and Materials (U.S.A.)
 Fed. Spec.: United States Federal Specification (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.

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