

BRADY B-702 FLEXIBLE FILM TAPE

TDS No. B-702
Effective Date: 12/09/1999

Description:

Brady B-702 is a flexible film tape with a white vinyl topcoat and a high tack rubber-based pressure sensitive adhesive.

Bray B-702 is an excellent wiremarker material for applications requiring good resistance to solvents and oils. It is an ideal marker for machine tool applications.

Brady B-702 has excellent flexibility, which makes it suitable for wrapping on thin gauge wire. The tape also has low profile when wrapped on wires.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Topcoat -Film -Adhesive -Total	0.0006 inch (0.015 mm) 0.0005 inch (0.013 mm) 0.0011 inch (0.028 mm) 0.0022 inch (0.056 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	45 oz/in (49 N/100 mm) 50 oz/in (55 N/100 mm)
-Polypropylene	20 minute dwell 24 hour dwell	45 oz/in (49 N/100 mm) 45 oz/in (49 N/100 mm)
-Textured ABS	20 minute dwell 24 hour dwell	20 oz/in (22 N/100 mm) 20 oz/in (22 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 1 second dwell	17 oz (500 g)
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction	12 lbs/in (210 N/100 mm), 80%
Application Temperature	Lowest application temperature to steel	50°F (10°C)

For Performance Properties testing, pre-printed B-702 wiremarkers were wrapped on 0.080" OD wires and unprinted B-702 samples were applied to flat aluminum panels. Samples were 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 212°F (100°C)	Some adhesive discoloration at 100°C, but marker still functional. No visible effect to printing.
Long Term Low Service Temperature	30 days at -40°F (-40°C)	No visible effect.
Short Term High Service Temperature	30 minutes at 320°F (160°C)	Slight material shrinkage.
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	

Pre-printed B-702 wiremarker samples were wrapped on 0.080" OD wires and unprinted samples were laminated to aluminum panels. Samples dwelled 24 hours prior to test. 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	VISIBLE EFFECT TO WIREMARKER	VISIBLE EFFECT TO FLAT PANEL
Methyl Ethyl Ketone	Severe unwrap, print removed	Topcoat dissolved

1,1,1-Trichloroethane	Severe unwrap, print removed	Topcoat removed
Isopropyl Alcohol	Severe unwrap	No visible effect
SAE 20 WT Oil	No visible effect	No visible effect
Mil 5606 Oil	Slight unwrap	Slight adhesive ooze
Speedi Kut Cutting Oil 332	No visible effect	No visible effect
Gasoline	Slight unwrap	Slight adhesive ooze
JP-4 Jet Fuel	Moderate unwrap	Slight adhesive ooze
Rust Veto® 377	Slight unwrap	No visible effect
Deionized Water	No visible effect	No visible effect
3% Alconox® Detergent	No visible effect	No visible effect
Northwoods™ Buzz Saw Citrus Degreaser	No visible effect	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°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.
Northwoods™ is a trademark of the Superior Chemical Corporation.
Polyken™ is a trademark of Testing Machines Inc.
Rust Veto® is a registered trademark of the E.F. Houghton & Co.
Sunlighter™ is a trademark of the Test Lab Apparatus Company
ASTM: American Society for Testing and Materials (U.S.A.)
SAE: Society of Automotive Engineers (U.S.A.)
All U.S. Conventional Units are mathematically derived from the S.I. (metric) 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.