



BRADY B-639 CLEAR PVF OVERLAMINATING TAPE

TDS No. B-639
Effective Date: 22-Jul-1998

Description:

Brady B-639 is a 1.0 mil transparent polyvinyl fluoride film with an acrylic pressure sensitive adhesive.

Brady B-639 is used as an overlaminate for labels where exceptional resistance to UV light and weathering is needed.

Brady B-639 contains UV light absorbers to help shield the label below from the effects of UV light and outdoor exposure. B-639 has good clarity and flexibility, as well as good high temperature and solvent resistance.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	0.0010 inch (0.025 mm) 0.0011inch (0.028 mm) 0.0021 inch (0.053 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	35 oz/in (38 N/100 mm) 40 oz/in (44 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 1 second dwell	19 oz (550 g)
Tensile Strength and Elongation	ASTM D 1000 -Machine Direction	15 lbs/in (263 N/100 mm), 70%
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-639 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
High Service Temperature	30 days at 248°F (120°C)	Slight adhesive yellowing at 120°C. No visible effect at 100°C.
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 G 26 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	Moderate edge lift
1,1,1-Trichloroethane	Slight edge lift
Isopropyl Alcohol	No visible effect
SAE 20 WT Oil	No visible effect
MIL-H-5606 Oil	No visible effect
Speedi Kut Cutting Oil 332	No visible effect
Gasoline	No visible effect
JP-4 Jet Fuel	No visible effect
Super Agitene®	No visible effect

3% Alconox® Detergent	No visible effect
Deionized Water	No visible effect
Skydrol® 500B-4	No visible effect
BIOACT® EC-7R™ terpene cleaner	Slight adhesive ooze
6% Alpha 2110 at 70°C	No visible effect
10% Sulfuric Acid Solution	No visible effect
10% Sodium Hydroxide Solution	No visible effect

Shelf Life: 2 years below 80°F (27°C) and 60% R.H.

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 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.

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