Technical Data Sheet

Effective Date: 16-Jan-2017

BRADY B-7543P SURFACE PRINTED POLYESTER WITHOUT OVERLAMINATE

Description:

GENERAL

Brady B-7543P is a surface printed white polyester with a permanent acrylic pressure sensitive adhesive without overlaminate.

SPECIAL FEATURES

B-7543P is used for pipe markers and signs.
B-7543P gives excellent adhesion to low surface energy surfaces such as polypropylene and ABS, as well as on most powder coatings.

ROHS Environmental Compliance

Brady B-7543P is compliant to RoHS2 directive 2011/65/EU.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000	
	-Substrate	0.050 mm
	-Adhesive	0.020 mm
	-Total	0.070 mm
Adhesion to:	ASTM D 1000	
-Stainless Steel	20 minute dwell	69 N/100 mm
	24 hour dwell	77 N/100 mm
-Polypropylene	20 minute dwell	55 N/100 mm
	24 hour dwell	62 N/100 mm
-Smooth ABS	20 minute dwell	74 N/100 mm
	24 hour dwell	92 N/100 mm
-Textured ABS	20 minute dwell	14 N/100 mm
	24 hour dwell	21 N/100 mm
-Powder Coated Metal	20 minute dwell	76 N/100 mm
	24 hour dwell	81 N/100 mm
Drop Shear	PSTC-7	38 hours
Tack	ASTM D 2979	225 g
	Polyken™ Probe Tack	
	1 second dwell	
Performance properties tested on digitally printed B-7543P material. Printed samples were laminated to aluminium and allowed to dwell 24 hours before exposure to the indicated environments.		

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
High service temperature	30 days at 120°C	No visible effect
Low service temperature	30 days at -40°C	No visible effect
Minimum application temperature		+2°C
Abrasion resistance	Taber Abraser, CS-10 grinding wheels 250g/arm,100 cycles 500g/arm,100 cycles	 Slight fading Slight to moderate fading
Humidity resistance	30 days at 37°C and 95% R.H.	No visible effect

B-7543P can only be used indoor, based on UV resistance testing in the Q-Sun Xenon Test Chamber Model Xe-3 (Daylight Filter, Irradiance 0.35 W/m², wavelength 340nm, continuous light at 63°C black panel temperature) and on weatherability testing in the QUV Accelerated Weathering Tester Model QUV/se, according to ASTM G154, Cycle 1.

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
Digitally printed samples are laminated to aluminium panels and allowed to dwell 24 hours prior to testing. Tests conducted at room temperature. Testing consisted of 5 cycles of 10 minute immersions in the specified test fluid, followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.	

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	EFFECT TO LABEL STOCK EFFECT TO PRINT	EFFECT TO PRINT WITH RUB
Gasoline	printing destroyed	printing destroyed
Alcohol mixture	nve	nve
Toluene	printing destroyed after first immersion	printing destroyed
Methyl Ethyl Ketone	printing destroyed after first immersion	printing destroyed
Isopropyl Alcohol	nve	nve
Acetone	printing destroyed after first immersion	printing destroyed
Diesel	nve	nve
n-Hexane	nve	nve
Iso-octane	nve	nve
Sulfuric acid solution (10%)	nve	nve
Sodium Chloride (10%)	nve	nve
Water distilled	nve	printing destroyed

*Alcohol mixture is a mixture of 50% ethanol, 30% methanol and 20% distilled water
Nve = No visible effect

Shelf Life and Fitness for Use:
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 and 60% RH*. 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:
Polyken™ is a trademark of Testing Machines Inc.
ASTM: American Society for testing and Materials (U.S.A.)
PSTC: Pressure Sensitive Tape Council (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.