

BRADY B-7665 HIGH GLOSS METALLIZED POLYESTER FOR INKJET PRINTING

TDS No. B-7665
Effective Date: 21/02/2022

Description:

GENERAL

Print Technology: Inkjet Printing
Material Type: Metallized Polyester
Finish: High Gloss
Adhesive: Permanent Acrylic

APPLICATIONS

BRADY B-7665 is a special coated high gloss metallized polyester material, qualified for use in roll form for on-demand printing on the VP750 Inkjet printer.

BRADY B-7665 provides excellent print quality results for product labelling, promotional labelling and industrial applications.

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 -Substrate -Adhesive -Total	0.081 mm 0.019 mm 0.153 mm
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	22 N/100 mm 39 N/100 mm
-Glass	20 minute dwell 24 hour dwell	22 N/100 mm 33 N/100 mm
-Polypropylene	20 minute dwell 24 hour dwell	17 N/100 mm 20 N/100 mm
-Powder Coated Aluminium	20 minute dwell 24 hour dwell	24 N/100 mm 29 N/100 mm

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
High service temperature	30 days at 90°C (196°F) 30 days at 80°C (176°F)	Slight fading No visible effect
Low service temperature	30 days at -40°C (-40°F)	No visible effect
Humidity	30 days humidity chamber at 37°C (100°F) and 95% R.H.	No visible effect
UV Light Resistance	30 days in Xenon Test Chamber	Complete fading of the print
Weatherability	ASTM G154 30 days in QUV	Complete fading of the print

Abrasion resistance	Taber Abraser, CS-10 grinding wheels 250 g/arm,200 cycles	Slight fading of the print, becomes less gloss
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PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Printed samples were laminated to aluminium panels and allowed to dwell for 24 hours prior to testing. Tests conducted at room temperature. Testing consisted of 30 minute immersions in the specified test fluid. After immersion the samples were rubbed 10 times with cotton swabs saturated with the test fluid.

	SUBJECTIVE OBSERVATION OF VISUAL CHANGE	
	WITHOUT RUB	WITH RUB
Isopropyl Alcohol	1	1
n-Hexane	1	1
Toluene	1	1
Deionised water	1	1
Acetone	1	1
Methyl ethyl ketone	1	1
Sulphuric Acid (10%)	2	3
Sodium Hydroxide (10%)	5*	5*
Skydrol® 500B-4	1	1
Ethanol 96%	1	1
Diesel B7	6	6
Gasoline E10	1	1
Brake fluid DOT4	2	3

Rating scale:

1= no visible effect

2= slight smear or print removal; detectable but minimal smear

3= moderate smear or print removal (print still legible)

4= severe smear or print removal

5= complete print and/or topcoat removal

6= discolouring of the material but print remains legible

* = edge lift

For improved chemical resistance a laminate is recommended :

B-7552: gloss clear polyester, available in Print and Protect format.

B-7564: matt clear polyester, available in Print and Protect format

B-7639: gloss clear polyester, not available in Print and Protect format. B-7639 is a UV blocking polyester and gives additional UV protection (see below).

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Printed samples overlaminated with B-7552, B-7564 and B-7639 were laminated to aluminium panels and allowed to dwell for 24 hours prior to testing. Tests conducted at room temperature. Testing consisted of 30 minute immersions in the specified test fluid. After immersion the samples were rubbed 10 times with cotton swabs saturated with the test fluid.

	SUBJECTIVE OBSERVATION OF VISUAL CHANGE		
	with B-7552 overlam	with B-7564 overlam	with B-7639 overlam
Isopropyl Alcohol	1	1	1
n-Hexane	1	1	1
Toluene	1	1	1
Deionised water	1	1	1
Acetone	1	1	1
Methyl ethyl ketone	1	1	1
Sulphuric Acid (10%)	1	1	1
Sodium Hydroxide (10%)	1	1	1
Skydrol® 500B-4	1	1	1
Ethanol 96%	1	1	1
Diesel B7	1	1	1
Gasoline E10	1	1	1
Brake fluid DOT4	1	1	1

Rating scale:

1= no visible effect

2= slight smear or print removal; detectable but minimal smear

3= moderate smear or print removal (print still legible)

4= severe smear or print removal

5= complete print and/or topcoat removal

6= discolouring of the material but print remains legible

* = edge lift

For improved weathering resistance, the UV blocking overlaminated B-7639 is recommended.**Average Outdoor Durability:**

Outdoor performance expectations for B-7665 with B-7639 overlaminated are 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.

The test results suggest that B-7665 with B-7639 overlamine may be used successfully in outdoor environments for a period of **up to 1 year**. Actual outdoor life of product will depend on user definition of failure, climatic conditions, mounting techniques and material color. See note and warranty statement below for additional information.

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:

ASTM: American Society for Testing and Materials (U.S.A.)
Skydrol® is a registered trademark of the Monsanto Company

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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