Technical Data Sheet

BRADY B-7578 THERMAL TRANSFER PRINTABLE MATTE WHITE POLYESTER LABEL STOCK

TDS No. B-7578
Effective Date: 03/06/2019

Description:

GENERAL

Print Technology: Thermal Transfer
Materials Type: Polyester
Finish: Matte
Adhesive: Permanent acrylic

APPLICATIONS

B-7578 is designed for applications such as topside of printed circuit boards and rating plates that utilize high quality/density alphanumerics, barcodes and graphics.

RECOMMENDED RIBBONS

Brady Series R7960
Brady Series R7961
Brady Series R7962

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 (excluding liner)	 0.0584 mm (0.0023 in) 0.0203 mm (0.0008 in) 0.0787 mm (0.0031 in)
Adhesion to: -Stainless Steel -Polypropylene	ASTM D 1000 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell	 48 N/100 mm (44 oz/in) 54 N/100 mm (49 oz/in) 34 N/100 mm (31 oz/in) 47 N/100 mm (43 oz/in)
Tensile Strength and Elongation	ASTM D 1000 -Machine	 765 N/100 mm (44 lbs/in), 90%
Tack	ASTM D 2979 Polyken™ Probe Tack 0.5 second dwell	526 g (19 oz)

Performance properties tested on B-7578 with the Brady series R7960, the Brady Series R7961 and the Brady Series R7962 ribbons. Printed samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environments. Unless noted, results are the same for all ribbons.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
Short Term High Service Temperature	5 minutes at various Temperatures	No visible effect at 180° C Label shrinkage at 210° C
Long Term High Service Temperature	30 days at various Temperatures	No visible effect at 100° C Label yellowed at 120° C
Low Service Temperature	30 days at -40° C (-40° F)	No visible effect
Humidity Resistance	30 days at 37° C (100° F), 95% R.H.	No visible effect
UV Light Resistance	30 days UV Sunlighter™ 100	Severe yellowing of topcoat

Weatherability	ASTM G 26 30 days in Xenon Arc Weatherometer	Slight topcoat discoloration and chalking.
Salt Fog Resistance	ASTM B 117 30 days in 5% salt fog solution chamber	No visible effect
Abrasion Resistance	Method 5306 US Federal Test 191A, Test consisted of 100 Cycles R7960 (CS10 + 250 g / arm) R7961 (CS10 + 250 g / arm) R7962 (CS10 + 250 g / arm)	 Moderate Fading Moderate Fading Very Slight Fading

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE

Samples printed with the Brady Series R7960, the Brady Series R7961 and the Brady Series R7962 ribbons. Samples laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Test conducted at room temperature. Testing consisted of 5 cycles of 10 minute immersions in the specified test fluid followed by a 30 minute recovery period. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE			
	LABEL STOCK	R7960	R7961	R7962
Isopropylalcohol	N.V.E.	N.V.E.	N.V.E.	N.V.E. w/o rubbing, S.F. w/ rubbing
Aceton	N.V.E.	Gone w/o rubbing	Gone w/o rubbing	Gone w/o rubbing
Ethyl Methyl Ketone	N.V.E.	Gone w/o rubbing	Gone w/o rubbing	Gone w/o rubbing
n-Hexane	N.V.E.	N.V.E.	N.V.E.	N.V.E.
1,1,1-Trichloroethane	N.V.E.	N.V.E. w/o rubbing, Gone w/ rubbing	N.V.E. w/o rubbing, Gone w/ rubbing	N.V.E. w/o rubbing, SL.F. w/ rubbing
Toluene	Slight chalking	SL.F. w/o rubbing, Gone w/ rubbing	SL.F. w/o rubbing, Gone w/ rubbing	N.V.E. w/o rubbing, Gone w/ rubbing
Diesel	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Gasfuel	N.V.E.	N.V.E. w/o rubbing, SL.F. w/ rubbing	N.V.E. w/o rubbing, S.F. w/ rubbing	N.V.E.
Iso-Octane	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Alcohol Mixture*	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Skydrol® 500B-4	N.V.E.	S.F. w/o rubbing, Gone w/ rubbing	S.F. w/o rubbing, Gone w/ rubbing	M.F. w/o rubbing, Gone w/ rubbing
Mineral Oil	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Sulfuric acid (10%)	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Sodium Chloride (10%)	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Sodium Hydroxide (10%)	Topcoat comes off	Topcoat gone	Topcoat gone	Topcoat gone
Water	N.V.E.	N.V.E.	N.V.E.	N.V.E.

* Alcohol mixture: 50% Methanole, 30% Ethanole and 20% Water.

N.V.E.: No visible effect
SL.F.: Slight fading
M.F.: Moderate fading
S.F.: Severe fading

Shelf Life:
Shelf life is 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° 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.)
Fed. Spec.: United States Federal Specification (U.S.A.)
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

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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