BRADY B-432 THERMAL TRANSFER PRINTABLE GLOSSY CLEAR POLYESTER LABEL STOCK

TDS No. B-432
Effective Date: 10/05/2022

Description:

GENERAL

Print Technology: Thermal transfer
Material Type: Clear polyester
Finish: Glossy clear
Adhesive: Permanent acrylic

APPLICATIONS

Rating and serial plates using alphanumerics, barcodes, graphic symbols and logos that require name plate quality.

RECOMMENDED RIBBONS

Brady Series R6000 Halogen Free
Brady Series R4400 (colors - red, blue, green, white)
Brady Series R4900 (alternate)

REGULATORY/AGENCY APPROVALS

UL: B432 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with the Brady Series R6000 Halogen Free ribbon. See UL file MH17154 for specific details. UL information can be accessed on-line at *UL.com*. Search in *Certifications* area. The Brady Series R4900 ribbon is also UL approved.

CSA: B-432 is CSA Accepted when printed with the Brady Series R6000 ribbon. See CSA file 041833 for specific details. CSA information can be accessed online at https://www.csagroup.org/testing-certification/product-listing/

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

SPECIAL FEATURES

B-432 is designed to withstand exposure to numerous solvents and exhibits good adhesion to many metal and other types of surfaces, including textured surfaces and low surface energy plastics.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total (excluding liner)	 0.002 inch (0.0508 mm) 0.002 inch (0.0508 mm) 0.004 inch (0.1016 mm)
Adhesion to: -Stainless Steel	ASTM D 1000 20 minute dwell 24 hour dwell	 47 oz/inch (51 N/100 mm) 55 oz/inch (60 N/100 mm)
-Textured ABS	20 minute dwell 24 hour dwell	30 oz/inch (33 N/100 mm) 35 oz/inch (38 N/100 mm)
-Polypropylene	20 minute dwell 24 hour dwell	47 oz/inch (51 N/100 mm) 51 oz/inch (55 N/100 mm)
-Enamel Painted Metal	20 minute dwell 24 hour dwell	54 oz/inch (59 N/100 mm) 61 oz/inch (67 N/100 mm)
-Powder Coated Metal	20 minute dwell 24 hour dwell	45 oz/inch (49 N/100 mm) 50 oz/inch (55 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack 0.5 second dwell	 37 oz (1150 g)

Tensile Strength and Elongation	ASTM D 1000 -Machine	45 lbs/inch (788 N/100 mm), 75%
Dielectric Strength	ASTM D 1000	7000 Volts

Performance properties tested on B-432 printed with the Brady Series R4900 and the Brady Series R6000 Halogen Free 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 both ribbons.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
High Service Temperature	30 days at 212°F (100°C)	No visible effect
Low Service Temperature	30 days at -40°F (-40°C)	No visible effect
Humidity Resistance	30 days at 100°F (37°C) and 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

Samples printed with the Brady Series R4900 and the Brady Series R6000 Halogen Free 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		
	EFFECT TO LABEL STOCK	R4900	R6000 Halogen Free
Methyl Ethyl Ketone	Slight adhesive ooze	No visible effect w/o rub, complete print removal after rub	No visible effect w/o rub, complete print removal after rub
Toluene	Slight adhesive ooze	No visible effect w/o rub, complete print removal after rub	No visible effect w/o rub, complete print removal after rub
Isopropyl Alcohol	No visible effect	No visible effect	No visible effect
Mineral Spirits	No visible effect	No visible effect	No visible effect
JP-8 Jet Fuel	Slight adhesive ooze	No visible effect	No visible effect
ASTM #3 Oil	No visible effect	No visible effect	No visible effect
Mil 5606 Oil	No visible effect	No visible effect	No visible effect
Gasoline	Slight adhesive ooze	No visible effect w/o rub, slight print removal after rub	No visible
Skydrol® 500B-4	Slight adhesive ooze	No visible effect w/o rub, complete print removal after rub	No visible effect w/o rub, severe print removal after rub
Super Agitene®	No visible effect	No visible effect	No visible effect
BIOACT® EC-7R™	Slight adhesive ooze	No visible effect	Not tested
Deionized Water	No visible effect	No visible effect	No visible effect
3% Alconox® Detergent	No visible effect	No visible effect	No visible effect
10% Sodium Hydroxide Solution	No visible effect	No visible effect	No visible effect
10% Sulfuric Acid Solution	No visible effect	No visible effect	No visible effect

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:
Alconox® is a registered trademark of Alconox Co.
BIOACT® is a registered trademark of Petroferm Inc.
EC-7™ 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.)
CSA: Canadian Standards Association
UL: Underwriters Laboratories Inc. (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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