Technical Data Sheet

BRADY B-7546 THERMAL TRANSFER PRINTABLE TAMPER EVIDENT GLOSSY WHITE POLYESTER

TDS No. B-7546
Effective Date: 07/11/2023

Description:
GENERAL
Print Technology: Thermal Transfer
Material Type: Polyester
Finish: Gloss
Adhesive: Permanent acrylic

APPLICATIONS
B-7546 is designed for applications such as rating and serial plates that require both high performance and protection against removal.

RECOMMENDED RIBBONS
Brady Series R6000 Halogen Free
Brady Series R4900
Brady Series R7962

REGULATORY APPROVALS
UL: B-7546 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with the Brady Series R6000 Halogen Free and Brady Series R6200 ribbons. See UL file MH17154 for specific details. UL information can be accessed on line at UL.com in the UL Product iQ area.

CSA: B-7546 is CSA Accepted to C22.2 No.0.1595 Adhesive Labels Standard when printed with Brady Series R6000 ribbon. See CSA file 041833 for specific details. CSA information can be accessed online at directories.csa-international.org.

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
The material leaves a “VOID” footprint if removed. In addition, a "VOID" pattern will appear on the top surface of the label in order to prevent it from being reused. Recommended 24 hour room temperature dwell before removal for full tamper evident performance.The adhesive nature of product does not allow for repositioning and requires minimal handling in order to prevent prematurely exposed VOID pattern.

Details:
Labels printed with the Brady Series R7962 and R4900 ribbons

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 - Substrate - Adhesive - Total (excluding liner)	 0.055 mm (0.0022 inch) 0.022 mm (0.0009 inch) 0.077 mm (0.0031 inch)
Adhesion to: - Stainless Steel - Smooth ABS - Polyethylene	ASTM D 1000 24 hour dwell 24 hour dwell 24 hour dwell	 59 N/100 mm (54 oz/inch) 51 N/100 mm (47 oz/inch) 33 N/100 mm (30 oz/inch)

Performance properties tested on B-7546 printed with the Brady Series R4900, R6000 Halogen Free and R7962 thermal transfer ribbons. Printed samples of B-7546 were laminated to aluminum before exposure to the indicated environmental

condition.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
High Service Temperature	30 days at 100°C (212°F)	No visible effect
Low Service Temperature	30 days at -20°C (-4°F)	No visible effect
Humidity Resistance	30 days at 38°C (100°F) and 95% R.H.	No visible effect
UV Light Resistance	30 days in UV light chamber	No visible effect
Weatherability	30 days in Q.U.V. (ASTM G 53)	No visible effect
Abrasion Resistance	Method 5306 US Fed. Test 191A 100 Cycles R-7962 (CS 10, 250g/arm) R-4900 (CS 10, 250g/arm) R-6000HF (CS 10, 250g/arm)	 No visible effect Text faded but still legible Text faded but still legible

The tamper evident VOID pattern of B-7546 was retained after exposure to all of the listed conditions.

PERFORMANCE PROPERTIES	CHEMICAL RESISTANCE

Samples printed with the Brady Series R7962, R4900 and R6000 Halogen Free thermal transfer 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	R7962
Water	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Isopropanol	N.V.E.	N.V.E.	N.V.E.	N.V.E. w/o rub S.F. w/ rubbing
Acetone	SL. Flaking	S.F. w/o rubbing	N.V.E. w/o rub S.F. w/rubbing	N.V.E. w/o rubbing S.F. w/ rubbing
Methyl Ethyl Ketone	SL. Flaking	S.F. w/o rubbing	N.V.E. w/o rub, S.F. w/ rubbing	N.V.E. w/o rubbing S.F. w/ rubbing
Toluene	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing	N.V.E w/o rubbing, S.F. w/ rubbing	N.V.E. w/o rubbing SL.F. w/ rubbing
1,1,1-trichloroethane	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing	Obsolete	N.V.E.
Ethanol	N.V.E.	N.V.E.	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing
Alcoholic Mixture*	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Diesel	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Gasfuel (unleaded)	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing	N.V.E.	N.V.E.
Sulfuric Acid (10%)	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Sodium Hydroxide (10%)	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Natrium Chloride (10%)	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Skydrol® 500 B 4	N.V.E.	S.F. w/o rubbing	N.V.E. w/o rubbing, S.F. w/rubbing	N.V.E. w/o rubbing S.F. w/ rubbing
Mineral Oil	N.V.E.	N.V.E.	N.V.E.	N.V.E.
Motor Oil (Power Ultralub 14W/40)	N.V.E.	N.V.E.	Not Tested	N.V.E.
n-Hexane	N.V.E.	N.V.E.	Not Tested	N.V.E.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE		
	EFFECT TO LABEL STOCK	R4900	R7962
Water	N.V.E.	N.V.E.	N.V.E.
Isopropanol	N.V.E.	N.V.E.	N.V.E. w/o rub S.F. w/ rubbing
Acetone	SL. Flaking	S.F. w/o rubbing	N.V.E. w/o rubbing S.F. w/ rubbing

Methyl Ethyl Ketone	SL. Flaking	S.F. w/o rubbing	N.V.E. w/o rubbing S.F. w/ rubbing
Toluene	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing	N.V.E. w/o rubbing SL.F. w/ rubbing
1,1,1-trichloroethane	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing	N.V.E.
Ethanol	N.V.E.	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing
Alcoholic Mixture*	N.V.E.	N.V.E.	N.V.E.
Diesel	N.V.E.	N.V.E.	N.V.E.
Gasfuel (unleaded)	N.V.E.	N.V.E. w/o rubbing S.F. w/ rubbing	N.V.E.
Sulfuric Acid (10%)	N.V.E.	N.V.E.	N.V.E.
Sodium Hydroxide (10%)	N.V.E.	N.V.E.	N.V.E.
Natrium Chloride (10%)	N.V.E.	N.V.E.	N.V.E.
Skydrol® 500 B 4	N.V.E.	S.F. w/o rubbing	N.V.E. w/o rubbing S.F. w/ rubbing
Mineral Oil	N.V.E.	N.V.E.	N.V.E.
Motor Oil (Power Ultralub 14W/40)	N.V.E.	N.V.E.	N.V.E.
n-Hexane	N.V.E.	N.V.E.	N.V.E.

N.V.E.: No Visible Effect
SL.F.: Slight Fading
S.F.: Severe Fading
w/o: Without rubbing
w/: With rubbing

* Alcoholic Mixture is a mixture of 50% Methanol, 30% Ethanol and 20% distilled water.

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:
Skydrol® is a registered trademark of the Monsanto Company
ASTM: American Society for Testing and Materials (U.S.A.)
CSA: Canadian Standards Association
UL: Underwriters Laboratories Inc. (U.S.A.)
Fed. Spec.: United States Federal Specification (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.