BRADY B-429 THERMAL TRANSFER PRINTABLE SATIN WHITE TAMPER EVIDENT LABEL STOCK

TDS No. B-429 Effective Date: 17/12/2019

Description:

GENERAL Print Technology: Thermal transfer Materials Type: Polyolefin Finish: Satin Adhesive: Permanent rubber

APPLICATIONS

B-429 is designed for applications like E-PROM labeling and rating plates that require both high performance and protection against removal.

RECOMMENDED RIBBONS

Brady Series R7960 Brady Series R7961 Brady Series R7962

REGULATORY/AGENCY APPROVALS

UL: B-429 is a UL recognized component when printed with Brady Series R7960 and Brady Series R7961 ribbons. See UL file MH17388 for specific details. UL information can be accessed on-line at UL.com in the UL Product iQ area.

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: <u>www.brady.co.jp/products/labelsuse/rohs</u>

All other regions: www.bradyid.com/weee-rohs

SPECIAL FEATURES

B-429 is designed to destroy upon removal. A 24 hour dwell time is recommended for ultimate destructibility.

Details:

PHYSICAL PROPERTIES	TEST METHOD	AVERAGE RESULTS
Thickness	ASTM D 1000	
	- Substrate	0.055 mm (0.00220 inch)
	- Adhesive	0.020 mm (0.00078 inch)
	- Total	0.075 mm (0.00300 inch)
Adhesion to:	ASTM D 1000	
- Stainless Steel	- 20 min. dwell - 40 min. dwell	Material self-destructs upon removal
Drop Shear	PSTC-7	Material self-destructs upon removal
Tack	ASTM D 2979	
	Polyken TM Probe Tack	625 g (22 oz)
	(0.5 sec dwell)	

Abrasion Resistance	Method 5306 of US Federal Test Method Std. No. 191A	
	(CS 10, 500g/arm)	Severe Fading (still legible)
	R-7961 (CS 10, 250g/arm) (CS 10, 500g/arm)	Slight Fading (still legible) Moderate Fading (still legible)
	R-7962 (CS 10, 250g/arm) (CS 10, 500g/arm)	Slight Fading (still legible) Moderate Fading (still legible)

Performance properties tested on B-429 printed with the Brady Series R7960, the Brady Series R7961 and the Brady Series R7962 ribbons. Printed samples were laminated to aluminium 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 80° C (176° F)	N.V.E.*
Low Service Temperature	30 days at -40° C (-40° F)	N.V.E.*
Application Temperature	Lowest application temperature to stainless steel	10°C (32°F)
Humidity Resistance	30 days in humidity chamber at 37° C and 95% R.H.	N.V.E.*
U.V. Resistance	30 days in U.V. light chamber	N.V.E.*
Weatherability**	30 days QUV (ASTM G-53)	Slight discoloration of the material and moderate discoloration of the printing.

* No Visible Effect

** B-429 is not recommended for long-term outdoor use.

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE

Samples printed with the Brady Series R7960, the Brady Series R7961 and the Brady Series R7962 ribbons. Samples laminated to aluminium 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	R7960	R7961	R7962
Isopropanol	No visible effect	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, text is gone after rub
Acetone	No visible effect	Slight fading w/o rub, severe fading after rub	Slight fading w/o rub, severe fading after rub	Slight fading w/o rub, severe fading after rub
Methyl Ethyl Ketone	Slight adhesive ooze	Moderate fading w/o rub, text is gone after rub	Severe fading w/o rub, severe fading after rub	Severe fading w/o rub, text is gone after rub
Ethanol	No visible effect	No visible effect w/o rub, no visible effect after rub	Slight fading w/o rub, severe fading after rub	Slight fading w/o rub, severe fading after rub
Toluene	Severe adhesive ooze	Severe fading w/o rub, no rub test was done because the material was completely destroyed by Toluene	Severe fading w/o rub, no rub test was done because the material was completely destroyed by Toluene	Severe fading w/o rub, no rub test was done because the material was completely destroyed by Toluene
Alcohol Mixture	No visible effect	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, moderate fading with rub
n-Hexane	Slight adhesive ooze	No visible effect w/o rub, severe fading after rub	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub
Iso-octane	No visible effect	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub
Diesel	No visible effect	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub
Ethylacetylacetate	No visible effect	No visible effect w/o rub, text is gone after rub	No visible effect w/o rub, text is gone after rub	No visible effect w/o rub, text is gone after rub
1,1,1 -Trichloroethane	Severe adhesive ooze	Severe fading w/o rub, severe fading after rub	No visible effect w/o rub, severe fading after rub	No visible effect w/o rub, no visible effect after rub
Sodium Hydroxide (10%)	No visible effect	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub	No visible effect w/o rub, no visible effect after rub

Sodium Chloride (10%)	No visible effect	No visible effect w/o rub,	No visible effect w/o rub,	No visible effect w/o rub,
		no visible effect after rub	no visible effect after rub	no visible effect after rub
Sulphuric Acid (10%)	No visible effect	No visible effect w/o rub,	No visible effect w/o rub,	No visible effect w/o rub,
		no visible effect after rub	no visible effect after rub	no visible effect after rub
Skydrol® 500 B 4	No visible effect	Severe fading w/o rub,	Severe fading w/o rub,	Severe fading w/o rub,
		severe fading after rub	severe fading after rub	severe fading after rub
Mineral Oil	No visible effect	No visible effect w/o rub,	No visible effect w/o rub,	No visible effect w/o rub,
		no visible effect after rub	no visible effect after rub	no visible effect after rub
Water	No visible effect	No visible effect w/o rub,	No visible effect w/o rub,	No visible effect w/o rub,
		no visible effect after rub	no visible effect after rub	no visible effect after rub

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 applications.

Trademarks:

Polyken[™] is a trademark of Testing Machines Inc. Skydrol® is a registered trademark of the Monsanto Company ASTM: American Society for Testing and Materials (U.S.A.) CSA: Canadian Standards Association Fed. Spec.: United States Federal Specification (U.S.A.) PSTC: Pressure Sensitive Tape Council (U.S.A.) UL: Underwriters Laboratories Inc. (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.

Copyright 2019 W.H. Brady, N.V. | All Rights Reserved Material may not be reproduced or distributed in any form without written permission.

Brady Europe | Industriepark C3 Lindestraat 20 | B9240 Zele | Belgium | Tel: +32 52.45.7811 | Fax: +32 52.45.7812