# BRADYBONDZ™ B-8423 SATIN POLYESTER THERMAL PRINTABLE LABEL STOCK

TDS No. B-8423
Effective Date:10/05/2022

**Description:**

## GENERAL

**Print Technology:** Thermal Transfer
**Material Type:** Polyester
**Finish:** Satin
**Adhesive:** Permanent Acrylic

## APPLICATIONS

B-8423 is designed for general purpose label and rating plate applications that utilize high quality/density alphanumerics, barcodes and graphics. B-8423 can also be used for solar panel identification. B-8423 is also used as post-process label on printed circuit boards.

## RECOMMENDED RIBBONS

Brady Series R6200 and R7961 (black)
Brady Series R4400 (red, blue, green and white)
Brady Series R6000 Halogen Free (alternate)

## REGULATORY/AGENCY APPROVALS

**UL:** B-8423 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with the Brady Series R6200, R7961 and R6000 Halogen Free ribbons. See UL file MH17154 for specific details. UL information can be accessed online at UL.com in the UL Product iQ area.

**CSA:** B-8423 is CSA Accepted to C22.2 No.0.15-15 Adhesive Labels standard when printed with the Brady Series R6000, R6200 and R7961 ribbons. See CSA file 041833 for specific details. CSA Information accessed on line 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-8423 is UL Recognized for Outdoor Use on glass, thermoset polyester plastic and polyvinyl fluoride plastic surfaces to support solar panel identification applications.

**Details:**

| PHYSICAL PROPERTIES | TEST METHODS | AVERAGE RESULTS |
|---|---|---|
| Thickness | ASTM D 1000<br>-Substrate<br>-Adhesive<br>-Total (excluding liner) | <br>0.0020 inch (0.051 mm)<br>0.0008 inch (0.020 mm)<br>0.0028 inch (0.071 mm) |
| Adhesion to:<br>-Stainless Steel<br><br>-Smooth ABS<br><br>-Polypropylene | ASTM D 1000<br>20 minute dwell<br>24 hour dwell<br>20 minute dwell<br>24 hour dwell<br>20 minute dwell<br>24 hour dwell | <br>51 oz/in (56 N/100 mm)<br>56 oz/in (61 N/100 mm)<br>50 oz/in (55 N/100 mm)<br>53 oz/in (58 N/100 mm)<br>21 oz/in (23 N/100 mm)<br>11 oz/in (23 N/100 mm) |

| | | |
|---|---|---|
| -Glass | 20 minute dwell<br>24 hour dwell | 59 oz/in (65 N/100 mm)<br>61 oz/in (67 N/100 mm) |

Performance properties tested on B-8423 printed with alphanumerics using the following: the Brady Series R6000 Halogen Free, the Brady Series R6200 and the Brady Series R7961 ribbons. Printed samples of B-8423 were laminated to aluminum before exposure to the indicated environmental condition.
Results the same for all ribbons unless noted otherwise.

| PERFORMANCE PROPERTIES | TEST METHODS | TYPICAL RESULTS |
|---|---|---|
| Long Term High Service Temperature | 30 days at various temperatures | No visible effect at 230°F (110°C). Slight discoloration at 293°F (145°C). Moderate discoloration at 320°F (160°C); label is still functional. |
| Low Service Temperature | 30 days at -112°F (-80°C) | No visible effect |
| Short Term High Service Temperature | 5 minutes at various temperatures | No visible effect at 356°F (180°C). Slight discoloration and label shrinkage at 392°F (200°C); label is functional. Label becomes non-functional at 446°F (230°C) due to label shrinkage. |
| Humidity Resistance | 30 days at 100°F (38°C) and 95% R.H. | No visible effect |
| Weatherability | ASTM G155, Cycle 1 30 days in Xenon Arc Weather-Ometer® | Slight discoloration |
| Abrasion Resistance | Taber Abraser, CS-10 grinding wheels, 250 g/arm (Fed. Std. 191A, Method 5306) | R6000 Halogen Free print is still legible after 100 cycles.<br>R6200 and R7961 print is still legible after 50 cycles. |

| PERFORMANCE PROPERTY | CHEMICAL RESISTANCE |
|---|---|

Samples were printed with the Brady Series R6000 Halogen Free, the Brady Series R6200 and the Brady Series R7961 ribbons. Tests were conducted after a 24 hour dwell. Testing was conducted at room temperature and consisted of 30 minute immersions in the specified test fluid. After immersion, the samples were removed from the test fluid and the printed image rubbed 10 times with a cotton swab saturated with the test fluid. The rating scale below shows the effect on quality of the print for each sample.

| CHEMICAL REAGENT | SUBJECTIVE OBSERVATION OF VISUAL CHANGE | | | | | | |
|---|---|---|---|---|---|---|---|
| | EFFECT TO LABEL STOCK | R6000 Halogen Free | | R6200 | | R7961 | |
| | | WITHOUT RUB | WITH RUB | WITHOUT RUB | WITH RUB | WITHOUT RUB | WITH RUB |
| Methyl Ethyl Ketone | Slight adhesive ooze | 1 | 5 | 1 | 5 | 2 | 5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Isopropyl Alcohol | Slight adhesive ooze | 1 | 2 | 1 | 2 | 1 | 4 |
| Mineral Spirits | Slight adhesive ooze | 1 | 1 | 1 | 2 | 1 | 2 |
| SAE 20W-50 Motor Oil | No visible effect | 1 | 1 | 1 | 1 | 1 | 1 |
| 10% wt Sodium Hydroxide | No visible effect | 1 | 1 | 1 | 1 | 1 | 1 |
| 10% wt Sulfuric Acid | No visible effect | 1 | 1 | 1 | 1 | 1 | 1 |
| 3% wt Alconox® Detergent | No visible effect | 1 | 1 | 1 | 1 | 1 | 1 |
| Formula 409® | No visible effect | 1 | 1 | 1 | 1 | 1 | 1 |

Rating Scale:
1 = no visible effect
2 = sight smear or print removal, detectable but minimal smear
3 = moderate smear or print removal (print still legible)
4 = severe smear or print removal (print illegible or just barely legible)
5 = complete print removal

**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.)
CSA: Canadian Standards Association
Weather-Ometer® is a registered trademark of Atlas Material Testing Technology LLC
Alconox® is a registered trademark of Alconox Co.
BRADYBONDZ™ is a trademark of Brady Worldwide, Inc.
Formula 409® is a registered trademark of The Clorox Company
SAE: Society of Automotive Engineers (U.S.A.)
UL: Underwriters Laboratories, Inc.
All S.I. Units (metric) are mathematically derived from the U.S. Conventional

**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.



---

Brady North America | 6555 W. Good Hope Rd | Milwaukee, WI 53223 | USA | Tel: 414-358-6600 | Fax: 800-292-2289