

BRADYBONDZ™ B-8425 GLOSS POLYPROPYLENE THERMAL TRANSFER PRINTABLE LABELSTOCK

TDS No. B-8425 Effective Date: 10/05/2022

Description:

GENERAL Print Technology: Thermal Transfer Material Type: Polypropylene Finish: Gloss Adhesive: Permanent Acrylic

APPLICATIONS

B-8425 is designed for general purpose label, asset identification, rating plate, and warning/instructional labeling.

RECOMMENDED RIBBONS

Brady Series R6000 Halogen Free black thermal transfer ribbon Brady Series R4400 colored thermal transfer ribbons.

REGULATORY/AGENCY APPROVALS

UL: B-8425 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with the Brady Series R6000 ribbon. See UL file MH17154 for specific details. UL information can be accessed online 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: www.brady.co.jp/products/labelsuse/rohs

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

Details:

| PHYSICAL PROPERTIES | TEST METHODS | AVERAGE RESULTS |
|---|---|---------------------------------|
| Thickness | ASTM D 1000 | |
| | -Substrate | 0.0023 inch (0.0584 mm) |
| | -Adhesive | 0.0008 inch (0.0203 mm) |
| | -Total (excluding liner) | 0.0031 inch (0.0787 mm) |
| Adhesion to: | ASTM D 1000 | |
| -Stainless Steel | 20 minute dwell | 35 oz/inch (38 N/100 mm) |
| | 24 hour dwell | 41 oz/inch (44 N/100 mm) |
| -Smooth ABS | 20 minute dwell | 33 oz/inch (35 N/100 mm) |
| | 24 hour dwell | 35 oz/inch (38 N/100 mm) |
| -Polypropylene | 20 minute dwell | 23 oz/inch (26 N/100 mm) |
| | 24 hour dwell | 28 oz/inch (31 N/100 mm) |
| -Glass | 20 minute dwell | 34 oz/inch (38 N/100 mm) |
| | 24 hour dwell | 37 oz/inch (40 N/100 mm) |
| Tack | ASTM D 2979 | |
| | Polyken™ Probe Tack | 22.9 oz (646 g) |
| | (0.5 second dwell, 1 cm/sec separation) | |
| Tensile Strength and Percent Elongation | ASTM D 1000 | |
| at Break | -Machine | 48 lbs/inch (841 N/100 mm), 35% |
| | -Cross Direction | 41 lbs/inch (718 N/100 mm), 47% |

Performance properties were tested using B-8425 printed with the Brady Series R6000 Halogen Free ribbon. Printed samples of B-8425 were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environmental conditions.

| PERFORMANCE PROPERTIES | TEST METHOD | TYPICAL RESULTS |
|------------------------------------|---|---|
| Long Term High Service Temperature | 30 days at 194°F (90°C) | No visible effect to label at 90°C |
| Low Service Temperature | 30 days at -40°F (-40°C) 30 days at -94°F (-70°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 ¹ | ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer | Moderate cracking of label stock. Label is still legible. |
| Abrasion Resistance | Taber Abraser, CS-10 grinding wheels, 250 g/arm (Fed. Std. 191A, Method 5306) | Print legible to: R6000: 100 cycles |

¹B-8425 is not recommended for long-term outdoor use.

| PERFORMANCE PROPERTY | CHEMICAL RESISTANCE |
|----------------------|---------------------|
| FERFORMANCE FROFERIT | CHEMICAL RESISTANCE |

Samples were printed with the Brady Series R6000 Halogen Free ribbon. Samples laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Test was conducted at room temperature except where noted. 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 OBSER | SUBJECTIVE OBSERVATION OF VISUAL CHANGE | |
|-------------------------------|-----------------------------------|--|--|
| | LABEL STOCK SUBSTRATE/ADHESIVE | R6000 Halogen Free | |
| Methyl Ethyl Ketone | No visible effect | No visible effect without rub, complete print removal after rub | |
| Isopropyl Alcohol | No visible effect | No visible effect without rub, severe print removal after rub | |
| Mineral Spirits | No visible effect | No visible effect without rub, slight print fade with rub | |
| SAE 20 WT Oil | No visible effect | No visible effect with and without rub | |
| Formula 409® | No visible effect | No visible effect without rub, severe print removal with rub | |
| 3% Alconox® Detergent | No visible effect | No visible effect without rub, moderate print fade with rub | |
| 10% Sodium Hydroxide Solution | No visible effect | No visible effect with and without rub | |
| 10% Sulfuric Acid Solution | No visible effect | No visible effect with and without rub | |

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:

Alconox® is a registered trademark of Alconox Co. Formula 409® is a registered trademark of the Clorox Company Polyken™ is a trademark of Testing Machines Inc. Sunlighter™ is a trademark of the Test Lab Apparatus Company ASTM: American Society for Testing and Materials (U.S.A.) SAE: Society of Automotive Engineers (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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