

**BRADY B-7425 THERMAL TRANSFER PRINTABLE POLYPROPYLENE LABEL STOCK**

TDS No. B-7425  
Effective Date: 04/15/2016

**Description:**

**GENERAL**

**Print Technology:** Thermal transfer  
**Material Type:** White polypropylene  
**Finish:** Matte white  
**Adhesive:** Acrylic

**APPLICATION**

Laboratory identification such as vials, centrifuge tubes and test tubes.

**RECOMMENDED RIBBONS**

Brady Series R4300, R6200 and R6400 black.

**REGULATORY**

Brady B-7425 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

**Details:**

| PHYSICAL PROPERTIES | TEST METHODS   | AVERAGE RESULTS                                  |
|---------------------|--|--|
| Thickness           | ASTM D1000<br>Total (excluding liner)                                      | 0.004 inches (0.1016 mm)                         |
| Adhesion to:        | ASTM D1000   |  |
| -Stainless steel    | 20 minute dwell<br>24 hour dwell   | 50 oz/in (55 N/100 mm)<br>61 oz/in (66 N/100 mm) |
| -Glass              | 20 minute dwell<br>24 hour dwell   | 47 oz/in (52 N/100 mm)<br>51 oz/in (56 N/100 mm) |
| -Polypropylene      | 20 minute dwell<br>24 hour dwell   | 54 oz/in (59 N/100 mm)<br>57 oz/in (62 N/100 mm) |
| Tack                | ASTM D2979<br>Polyken™ Probe Tack<br>(1 second dwell, 1 cm/sec separation) | 33 oz (922 g)                                    |

**ENVIRONMENTAL PERFORMANCE PROPERTIES – LABEL APPLIED TO ROOM TEMPERATURE SURFACE**

B-7425 samples were printed with Series R4300 and R6400 thermal transfer ribbons. B-7425 samples were adhered at room temperature to the surfaces listed below.

| ENVIRONMENT              | TEST METHOD  | TYPICAL RESULTS  |
|--------------------------|--|--|
| High Service Temperature | 5 days at 70°C (158°F)   | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>✓ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> <li>✓ glass microscope slide</li> <li>✓ polyethylene bag</li> </ul>   |
| Low Service Temperature  | 5 days at -80°C (-112°F)   | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>✓ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> <li>✓ glass microscope slide</li> <li>✓ polyethylene bag</li> </ul>   |
| Simulated Incubator      | 3 cycles of 1 hour at 70°C (158°F) and 3 hours at room temperature     | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>◆ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> <li>✓ glass microscope slide</li> <li>✓ polyethylene bag</li> </ul>   |
| Autoclave                | 5 cycles at 120°C (248°F) for 20 minutes                               | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>✓ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> <li>✓ 15 ml polypropylene tube</li> <li>✓ 50 ml polypropylene tube</li> <li>✓ glass microscope slide</li> <li>✓ vial top</li> </ul> |
| Freezer                  | 5 cycles of 16 hours at -80°C (-112°F) and 8 hours at room temperature | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>✓ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> </ul>   |

|                                  |   |  |
|----------------------------------|---|--|
|                                  |   | <ul style="list-style-type: none"> <li>✓ 15 ml polypropylene tube</li> <li>✓ 50 ml polypropylene tube</li> <li>✓ well plate</li> <li>✓ glass microscope slide</li> <li>✓ polyethylene bag</li> <li>✓ vial top</li> </ul>   |
| Liquid Nitrogen                  | 5 cycles of 4 hours at -196°C (-320°F) and 20 hours at room temperature             | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>✓ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> <li>✓ 15 ml polypropylene tube</li> <li>✓ 50 ml polypropylene tube</li> <li>✓ glass microscope slide</li> <li>✓ vial top</li> </ul> |
| Freezer to Boiling Water         | 1 hour at -80°C (-112°F) then placed in boiling water (100°C/212°F) for 10 minutes  | <ul style="list-style-type: none"> <li>✓ 8.5 ml glass test tube</li> <li>◆ 1.5 ml polypropylene cryovial</li> <li>✓ 5 ml polypropylene cryovial</li> <li>✓ 15 ml polypropylene tube</li> <li>✓ 50 ml polypropylene tube</li> <li>✓ glass microscope slide</li> <li>◆ vial top</li> </ul> |
| Liquid Nitrogen to Boiling Water | 1 hour at -196°C (-320°F) then placed in boiling water (100°C/212°F) for 10 minutes | <ul style="list-style-type: none"> <li>◆ 8.5 ml glass test tube</li> <li>◆ 1.5 ml polypropylene cryovial</li> <li>◆ 5 ml polypropylene cryovial</li> <li>◆ 15 ml polypropylene tube</li> <li>◆ 50 ml polypropylene tube</li> <li>◆ glass microscope slide</li> <li>◆ vial top</li> </ul> |

✓=Label suitable for application; no visible effect, label remains adhered to test surface

◆=Label may work in application; test results were mixed

#### PERFORMANCE PROPERTIES – CHEMICAL RESISTANCE

The chemical resistance of B-7425 printed with Series R4300, R6200 and R6400 ribbons was tested at room temperature. The samples were immersed in the test solvent for 15 minutes. The samples were removed and rubbed 10 times with a cotton swab saturated with the test fluid. The samples were rated for the amount of print removal using the rating scale below.

| CHEMICAL REAGENT             | SUBJECTIVE OBSERVATION OF VISUAL CHANGE |                          |                    |                    |
|------------------------------|---|--------------------------|--------------------|--------------------|
|                              | EFFECT TO LABEL STOCK/ADHESIVE          | EFFECTS TO PRINTED IMAGE |                    |                    |
|                              |   | R4300                    | R6200              | R6400              |
| Ethanol                      | No visible effect                       | 1                        | 1                  | 1                  |
| Methanol                     | No visible effect                       | 1                        | 1                  | 1                  |
| Toluene                      | Slight adhesive ooze                    | 2                        | 4                  | 1                  |
| Acetone                      | No visible effect                       | 1                        | 4                  | 1                  |
| Isopropyl Alcohol            | No visible effect                       | 1                        | 1                  | 1                  |
| Xylene                       | Slight adhesive ooze                    | 1-2                      | 4-5                | 1                  |
| 10% Formalin                 | No visible effect                       | 1                        | 1                  | 1                  |
| Dimethylsulfoxide (DMSO)     | No visible effect                       | 1                        | 2                  | 1                  |
| 50% Acetic Acid              | No visible effect                       | 1                        | 2                  | 1                  |
| 10% Sodium Hydroxide         | No visible effect                       | 5, topcoat removal       | 5, topcoat removal | 5, topcoat removal |
| 10% Chlorox® bleach solution | No visible effect                       | 1                        | 1                  | 1                  |

#### Rating Scale

1=no visible effect

2=slight print smear or removal

3=moderate smear or print removal (print is still legible)

4=severe smear or print removal

5=complete print and/or topcoat removal

Product testing, customer feedback and history of similar products, support a customer performance expectation of at least **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 degrees F (27°C) and 60% RH. We are confident that our product will perform well beyond this time frame. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use in their actual applications.

#### Trademarks:

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**Note:** All values shown are averages and should not be used for specification purposes.

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