

BRADY B-7597 WHITE OPAQUE POLYETHYLENE TAG

TDS No. B-7597

Effective Date: 02/01/2025

Description:

GENERAL

B-7597 is a white opaque polyethylene tag with a topcoat specifically formulated for thermal transfer printing.

APPLICATIONS

The facestock resists tearing and the topcoat resists smudging and abrasion when printed with Brady thermal transfer ribbons.

RECOMMENDED RIBBONS

Recommended ribbons for B-7597 are BradySeries R7950, R7960, R7961 and R4300 black thermal transfer ribbons.

SPECIAL FEATURES

Brady B-7597 meets the requirements of a halogen-free material per DIN VDE 0472 part 815. (Statement based on review of product construction and confirmatory halogen content test run at an independent test laboratory.)

REGULATORY/AGENCY APPROVAL

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.bradyc.co.jp/products/labelsuse/rohs

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

Details:

| PHYSICAL PROPERTIES | TEST METHODS | AVERAGE RESULTS |
|---------------------|--------------|--------------------------------|
| Total Thickness | ASTM D 1000 | 0,2 mm (0.008 inch) |
| Tensile Strength | ASTM D 1000 | 528,9 N/100 mm (30.2 lbs/inch) |
| Elongation | ASTM D 1000 | 23,7 mm (193%) |

Performance properties tested on B-7597 printed with R-7950, R-7960 and R-7961. Labels tested after 24 hours dwell time.

| PERFORMANCE PROPERTIES | TEST METHOD | TYPICAL RESULTS |
|--------------------------|---|--|
| Low Service Temperature | 30 days at -40° C (-40° F) | No visible effect |
| High Service Temperature | 30 days at 100° C (212° F) | No visible effect to print, slight tag curl |
| Humidity Resistance | 30 days at 37° C (99° F) and 80% R.H. | No visible effect to material or print |
| UV Light Resistance | 30 days in UV light chamber | No visible effect to material or print |
| Weatherability* | 30 days in QUV (ASTM G26) | Slight yellowing of material, no visible effect to print |
| Abrasion Resistance | Method S306 US Federal Test 191A CS 10 + 500 g/arm | Number of cycles until print is illegible R-7950 30 cycles R-7960 70 cycles R-7961 120 cycles |

*B-7597 has limited outdoor use (1 year maximum)

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

Samples printed with thermal transfer ribbons R-7950, R-7960 and R-7961. The test was conducted at room temperature. Testing consisted of 5 cycles of 10 minutes immersions in the specified test fluid followed by a 30 minute recovery period. After the final immersion the samples are rubbed 10 times with a cotton swab saturated with the test fluid.

| CHEMICAL REAGENT | SUBJECTIVE OBSERVATION OF VISUAL CHANGE | | | |
|------------------|---|--------|--------|--------|
| | EFFECT TO MATERIAL | R-7950 | R-7960 | R-7961 |

| | | | | |
|------------------------------|---|--|---|---|
| 1,1,1-Trichloroethane | No visible effect | Slight print fade w/o rub, complete print removal w/ rub | Moderate print fade w/o rub, complete print removal w/ rub | Complete print removal when immersed |
| IPA | No visible effect | No visible effect w/o rub, moderate print smear w/ rub | No visible effect w/o rub, slight print removal w/ rub | No visible effect w/o rub, moderate print removal after rub |
| Alcohol Mixture* | No visible effect | No visible effect w/o rub, slight print removal w/ rub | No visible effect w/o rub, complete removal w/ rub | No visible effect w/o rub, moderate print removal w/ rub |
| Gasoline | Slight material curl | No visible effect w/o rub, complete print removal w/ rub | No visible effect w/o rub, complete print removal w/ rub | Moderate print fade w/o rub, complete print removal with rub |
| Skydrol® 500B-4 | Slight material curl | Print lift w/o rub, complete print removal w/ rub | Print lift w/o rub, complete print removal with rub | Print lift w/o rub, complete print removal with rub |
| MIL-5606 Oil | Slight material curl | No visible effect with and without rub | No visible effect with and without rub | No visible effect with and without rub |
| ASTM #3 Oil | Slight material curl | No visible effect with and without rub | No visible effect with and without rub | No visible effect with and without rub |
| 5% Sodium Hydroxide Solution | Topcoat degradation on edge of material | No visible effect w/o rub, severe print removal w/ rub | No visible effect w/o rub, complete print removal after rub (topcoat removed) | No visible effect without rub, complete print removal after rub (topcoat removed) |
| 5% Sulfuric Acid Solution | No visible effect | No visible effect with and without rub | No visible effect with and without rub | No visible effect with and without rub |
| Deionized Water | No visible effect Topcoat scratched off after immersion | No visible effect w/o rub, moderate print smear w/ rub | No visible effect w/o rub, slight print smear w/ rub | No visible effect w/o rub, slight print smear with rub |

* Alcohol Mix is 50% ethanol, 30% methanol, and 20% water by volume.

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.)

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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