

BRADY B-109 TAG

TDS No. B-109
Effective Date: 03/21/2019

Description:

GENERAL

Print Technology: Thermal transfer and dot matrix

Material Type: Cross laminated polyethylene film tag

Finish: Matte

APPLICATIONS

B-109 is a multipurpose tag that can be used for a variety of tag applications including identification of multiconductor cables, inventory, equipment, lockout, safety warning repair and work-in-progress.

B-109 is extremely tear resistant. It is also a good cold-weather tag.

RECOMMENDED RIBBONS

Brady Series R4300
Brady Series R6200

REGULATORY APPROVALS

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

Note- Past B-109 in the market is RoHS compliant using Exemption 10a for DecaBDE in Polymeric Materials (10/13/2005). Materials labeled with RoHS compliant statement on product packaging is PBDE free and is RoHS compliant without Exemption 10a for DecaBDE.

Details:

| PHYSICAL PROPERTIES | TEST METHODS | AVERAGE RESULTS |
|---------------------------------|---|--|
| Thickness | ASTM D 1000 -Substrate | 0.0085 inch (0.216 mm) |
| Hole Tear Strength | Brady LAB F003* -Machine Direction -Cross Direction | 30.4 lbs. (13.8 kg) 23.4 lbs. (10.6 kg) |
| Tear Propagation Resistance | ASTM D 1938 -Machine Direction -Cross Direction | 10.7 lbs. (4.8 kg) 10.2 lbs. (4.6 kg) |
| Tensile Strength and Elongation | ASTM D 1000 -Machine Direction -Cross Direction | 69 lbs/in (1208 N/100 mm), 430% 81 lbs/in (1418 N/100 mm), 336% |
| Dielectric Strength | ASTM D 1000 | 61,500 volts |

* LAB F003 is a Brady Worldwide, Inc. laboratory test procedure and is available upon request.

Performance Properties tested on B-109 printed with the Brady Series R4300 and the Brady Series R6200 thermal transfer ribbons.

| PERFORMANCE PROPERTIES | TEST METHODS | TYPICAL RESULTS |
|------------------------------------|---|--|
| Long Term High Service Temperature | 30 days at various temperatures | 120°F (49°C) No visible effect 176°F (80°C) Slight edge curl 193°F (90°C) Slight edge curl 212°F (100°C) Moderate edge curl |
| Long Term Low Service Temperature | 30 days at -40°F (-40°C) | No visible effect |
| Humidity Resistance | 30 days at 100°F (37°C), 95% R.H. | No visible effect |
| UV Light Resistance | ASTM G115, Cycle 1, without water spray 30 days in Xenon Arc Chamber | Yellow discoloration of tag. Print still legible. |

| | | |
|----------------|--|--|
| Weatherability | ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer | Slight yellow discoloration of tag. Print still legible. |
|----------------|--|--|

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

Samples were printed with the Brady Series R4300 and the Brady Series R6200 thermal transfer ribbons. Test was conducted at room temperature after 24 hour dwell. Testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by 30 minute recovery periods. After last immersion samples rubbed 10 times with cotton swab.

| CHEMICAL REAGENT | SUBJECTIVE OBSERVATION OF VISUAL CHANGES | |
|-------------------------------|--|--|
| | R4300 | R6200 |
| Methyl Ethyl Ketone | No visible effect w/o rub, complete print removal w/rub | No visible effect w/o rub, complete print removal w/rub |
| Toluene | No visible effect w/o rub, complete print removal w/rub | No visible effect w/o rub, complete print removal w/rub |
| Isopropyl Alcohol | No visible effect w/o rub, slight print fade with rub | No visible effect w/o rub, slight print fade with rub |
| Mineral Spirits | No visible effect w/o rub, slight print fade with rub | No visible effect w/o rub, slight print fade with rub |
| JP-8 Jet Fuel | No visible effect w/o rub, slight print smear with rub | No visible effect w/o rub, slight print smear with rub |
| ASTM #3 Oil | No visible effect with or without rub | No visible effect with or without rub |
| Mil 5606 Oil | No visible effect with or without rub. Topcoat stained pink. | No visible effect with or without rub. Topcoat stained pink. |
| Skydrol® 500B-4 | Complete print removal without rub. | Complete print removal without rub. |
| Super Agitene® | No visible effect w/o rub, slight print smear with rub | No visible effect w/o rub, slight print smear with rub |
| Deionized Water | No visible effect with or without rub | No visible effect with or without rub |
| 3% Alconox® Detergent | No visible effect with or without rub | No visible effect with or without rub |
| 10% Sulfuric Acid Solution | No visible effect with or without rub | No visible effect with or without rub |
| 10% Sodium Hydroxide Solution | No visible effect w/o rub, slight print smear w/rub | No visible effect w/o rub, complete print removal w/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.
 Skydrol® is a registered trademark of the Monsanto Company
 Super Agitene® is a registered trademark of Graymills Corporation
 ASTM: American Society for Testing and Materials (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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