

BRADY B-145 RIGID POLYETHYLENE TAG MATERIAL

TDS No. B-145
Effective Date: 06/11/2009

Description:

GENERAL

B-145 is a tag material constructed from an 9.5 mil cross laminated polyethylene film and a thermal transfer printable topcoat.

APPLICATIONS

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

RECOMMENDED RIBBONS

Brady Series R6210 black ribbon

REGULATORY

Brady B-145 is RoHS compliant to 2005/618/EC MCV amendment to RoHS Directive 2002/95/EC.

SPECIAL FEATURES

B-145 is supplied in a one-ply format suitable for thermal transfer printing on the Brady TLS2200® Thermal Labeling System. After printing, B-145 is folded over and held together in a two-ply format with a pressure sensitive adhesive. B-145 is extremely tear resistant.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 - Complete Two-ply Tag Construction - Substrate - Adhesive	0.023 inches (0.584 mm) 0.010 inches (0.251 mm) 0.001 inches (0.026 mm)
Adhesion to: -Stainless Steel (adhesive on backside of 1 ply tag)	ASTM D 1000 20 minute dwell 24 hour dwell	80 oz/in (88 N/100 mm) 90 oz/in (99 N/100 mm)
Hole Tear Strength - Complete Construction	Brady LAB F003* -Machine Direction -Cross Direction	25 lbs. (11 kg) 36 lbs. (16 kg)
Tear Propagation Resistance - Single Layer	ASTM D 1938 -Machine Direction -Cross Direction	13 lbs. (6 kg) 11 lbs. (5 kg)
- Complete Construction	-Machine Direction -Cross Direction	26 lbs. (12 kg) 28 lbs. (13 kg)
Tensile Strength and Elongation - Single Layer	ASTM D 1000 -Machine Direction -Cross Direction	67 lbs/in (1173 N/100 mm), 413 % 82 lbs/in (1436 N/100 mm), 316 %
- Complete Construction	-Machine Direction -Cross Direction	113 lbs/in (1979 N/ 100 mm), 392 % 149 lbs/in (2609 N/100 mm), 324 %

* LAB F003 is a Brady Worldwide, Inc.laboratory test procedure.

The performance properties were tested on B-145 tapecolored grey and printed with Brady Series R6210 thermal transfer ribbon using a Brady TLS2200® Thermal Labeling System.

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
Long Term High Service Temperature	30 days at 212°F (100°C)	No visible effect
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	30 days in UV Sunlighter™ 100	No visible effect
Weatherability	ASTM G155, Cycle 1	No visible effect

30 days in Xenon Arc Weatherometer

PERFORMANCE PROPERTY

CHEMICAL RESISTANCE

B-145 samples were tapecolored grey and printed with Brady Series R6210 thermal transfer ribbon using a TLS2200® Thermal Labeling System. The test was conducted at room temperature after a 24 hour dwell. The testing consisted of 5 cycles of 10 minute immersions in the specified chemical reagent followed by a 30 minute recovery period. After the last immersion, the samples were rubbed 5 times with a cotton swab.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGES
	R6210
Formula 409® Cleaner	No visual effect to tapecoloring or print without rub. Complete removal of tapecoloring and slight print removal after rubs.
Tap Water	No visual effect to print or tapecoloring after rubs.
Citrus Cleaner	No visual effect to tapecoloring and slight print fade without rubs. Complete print and tapecolor removal after rubs.
Isopropyl Alcohol	No visual effect to print and slight removal of tapecoloring without rubs. No visual effect to print and slight tapecolor removal after rubs.

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 degrees 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:

Formula 409® is a registered trademark of the Clorox Company
Sunlighter™ is a trademark of the Test Lab Apparatus Company
TLS2200® is a registered trademark of Brady Worldwide, Inc.
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.

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.

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