BRADY
WHEN PERFORMANCE MATTERS MOST™

Technical Data Sheet

BRADY B-8010 MATTE BLACK LASER MARKABLE POLYESTER LABEL STOCK

TDS No. B-8010
Effective Date: 01/07/2011

Description:

GENERAL

Print Technology: Laser Marking
Materials Type: Polyester (2mils)
Finish: Matt Black Overcoat
Adhesive: Permanent Pressure Sensitive Acrylic

APPLICATIONS

B-8010 is designed to be CO2 and YAG laser markable.

B-8010 is a high performance material designed for use in rating plate applications requiring excellent solvent resistance.

RoHS ENVIRONMENTAL COMPLIANCE

Brady B-8010 is RoHS compliant using EU Directive 2002/95/EC

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	 0.0022 inch (0.056 mm) 0.0007 inch (0.018 mm) 0.0029 inch (0.074 mm)
Adhesion to: -Stainless Steel - Polycarbonate	ASTM D 1000 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell	 36 oz/inch (40 N/100 mm) 41 oz/inch (46 N/100 mm) 43 oz/inch (48 N/100 mm) 58 oz/inch (64 N/100 mm)

B-8010 samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environments

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
Short Term High Service Temperature	180°C for 5 min	Very slight shrinkage; No visible effect to topcoat; Label remains functional.
	170°C for 2hours	Very slight shrinkage; No visible effect to topcoat; Label remains functional.
Humidity Resistance	30 days at 100°F(37°C), 95% RH	No visible effect
High Service Temperature	30 days at 212 °F (100°C)	No visible effect
Low Service Temperature	30 days at –40°F (-40°C)	No visible effect.
UV Light Resistance	30 days in QUV.	No visible effect
Weatherability	ASTM G155 1000 hrs in Xenon Arc Weatherometer	No visible effect

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE

Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of rubbing 100 cycles (to and fro) with a cotton swab saturated with the test fluid.

	SUBJECTIVE OBSERVATION OF VISUAL CHANGE
CHEMICALREAGENT	EFFECTS TO BLACK TOPCOAT
Ethanol	No visible effect
Hexane	No visible effect.
Isopropyl Alcohol	No visible effect.
Thinner	No visible effect.
Xylene	No visible effect

The following properties defined are based on immersions at room temperature, unless otherwise noted.

		SUBJECTIVE OBSERVATION OF VISUAL CHANGE
CHEMICALREAGENT	**EXPOSURE TIME**	**EFFECTS TO BLACK TOPCOAT**
Isopropyl Alcohol	100 hours	No delamination
Hexane	100 hours	No delamination
Bleach (Kao® or equivalent)	100 hours	No delamination
1% Sodium hydroxide	100 hours	No delamination
1% Sulphuric acid	100 hours	No delamination
Deionized water at 65°C	200 hours	No delamination
ESSO® SAE 40 Oil	100 hrs	No delamination

Product testing, customer feedback, and history of similar products, support a customer performance expectation of at least***one year 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 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:
ASTM: American Society for Testing and Materials (U.S.A.)
ESSO® is the registered trademark of Exxon Mobil Corporation
Kao® is the registered trademark of Kao Corporation
S. I.: International System of 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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