# **Technical Data Sheet**



### **BRADY B-388 STANDARD TEMPERATURE CABLE MARKER**

TDS No. B-388

Effective Date: 3/31/19

## **GENERAL PRODUCT DESCRIPTION:**

**Print Technology:** Thermal Transfer

Material Type: Polyolefin Available Colors: White

## **APPLICATIONS:**

B-388 cable markers are designed as a high performance wire bundle and cable identification tag. This standard temperature cable marker is meant for areas with continuous operating temperature up to 135°C.

#### **RECOMMENDED RIBBON**

Brady R6600 series black ribbon

### **REGULATORY APPROVALS**

B-388 is compliant to RoHS Directive 2011/65/EU and Amendment 2015/863. The product does not contain substances on the REACH Candidate List dated January 15, 2019 at a concentration >0.1%

# **SPECIAL FEATURES**

B-388 cable markers are supplied in roll form designed for use with thermal transfer printers. The unique design has smooth edges which minimize risk of abrasion to wire and cable jackets.

## Details:

PHYSICAL-PROPERTIES	TEST METHODS	TYPICAL RESULTS
Thickness		0.020 +/- 0.003 inches
Tensile Strength	ASTM D882, 20"/min speed	> 1500 psi
Ultimate Elongation	ASTM D882, 20"/min speed	> 200 %
Specific Gravity	ASTM D792 Method A	≤ 1.48

PERFORMANCE PROPERTIES	TEST METHODS	TYPICAL RESULTS
Heat Shock	4 hours @ 250°C, bend over 10x	Tag darkens but is legible, no
	thickness mandrel	cracking when bent over mandrel
Heat Aging	168 hours @ 175°C bend over	Tag darkens slightly but is
	10x thickness mandrel	legible, no cracking when bent
		over mandrel
Low Temperature Flexibility	4 hours @ -55°C, bend over 10x	No visible effect, no cracking
	thickness mandrel	when bent over mandrel
Operating Temperature		-55°C to 135°C
Copper Mirror Corrosion	ASTM D 2671, Procedure A	No corrosion
Weatherability	ASTM G155 Cycle 1, 1000 hours	Tag darkens slightly but is legible
UV Light Resistance	ASTM G155 Cycle 1 dry, 1000	Tag darkens slightly but is legible
	hours	
Humidity Resistance	1000 hours at 100°F/95% RH	No visible effect
Salt Fog	1000 hours at 5% Salt Spray	No visible effect

B-388 Standard Temperature Cable Markers exhibit the following performance when printed using the Brady i7100 (300 dpi) with R6600 black ribbon.

PERFORMANCE PROPERTY	TEST METHODS	TYPICAL RESULTS
Print Adherence per SAE-AS5942 (sec 4.1)	20 eraser rubs with 2 lb pressure	Print legible, no visible effect
Solvent Resistance per SAE-AS5942 (Sec 3.4.2)	MIL-STD-202-215 Method 215	Print legible, no visible effect

# Chemical resistance

Samples were thermal transfer printed with Brady R6600 series black ribbon. Tests were 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 the final immersion, the samples were removed from the test fluid and the printed image was rubbed 20 (10 double rubs) times with a cotton swab saturated with the test fluid.

CHEMICAL REAGENT	R6600 PRINTING WITHOUT RUB	R6600 PRINTING WITH RUB
Isopropyl alcohol	1	1
Methyl Ethyl Ketone	1	3
Gasoline	1	3
Diesel Fuel	1	2
MIL 5606 Oil	1*	1
20W Oil	1	1
Skydrol ® 500 B-4	1	2
JP-8 Jet Fuel	1	1
10% NaCl	1	2
Deionized Water	1	1

<sup>\*</sup>Swelling of the tag was observed

# PRINT EFFECT

- 1 = No visible effect
- 2 = Slight smear or print removal, detectable but minimal smear
- 3 = Moderate smear or print removal (print still legible)
- 4 = Severe smear or print removal (print illegible or just barely legible)
- 5 = Complete print removal
- NP = print removed prior to rub

Shelf life is five years from the date of receipt for this product as long as this product is stored in its original packaging in an environment at 32-95 degrees F (0-35 degrees C). 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 applications.

### Trademarks:

ASTM: American Society for Testing and Materials (U.S.A.) Skydrol® is a registered trademark of Monsanto Company

**Note:** All values shown are typical 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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