

Effective Date: 02-June-2017

# **Technical Data Sheet**

# Brady B-7598 Thermal Transfer Printable Polyester Tag

# **DESCRIPTION:**

GENERAL Print Technology: Thermal transfer Material Type: Rigid polyester tag Finish: Glossy Colours: Available in white, black, yellow, red, green, blue and metalized

### **APPLICATIONS**

Marking of electrical cable and wires of various diameters. With the use of a transfer adhesive it can be used for patch panel identification and equipment identification.

### <u>RIBBONS</u>

Brady series R-6000 Halogen Free Brady series R-4400 (colours – white, red, green and blue)

#### REGULATORY

B-7598 is compliant to RoHS2 directive 2011/65/EU

## **PROPERTIES for tag material:**

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL RESULTS
Thickness	ASTM D 1000	0,200 mm (0.008 inch)

Samples printed with the R-6000 Halogen Free ribbon and dwelled 24 hours prior to test.

PERFORMANCE PROPERTIES	TEST METHOD	TYPICAL RESULTS
High Service Temperature	1000 hours at 100°C (212°F)	No visible effect on THT-printing Green, yellow, blue and red tag material is getting slightly darker.
Low Service Temperature	120 days at -40°C (-40°F)	No visible effect
Humidity Resistance	4 months at 37°C/95%R.H.	No visible effect
Abrasion Resistance	Taber Abraser, CS-10 grinding wheels 500g/arm	R-6000 Halogen Free: Numbers of cycles until print is illegible: 175 cycles R-4400WT: Numbers of cycles until print is illegible: 75 cycles

## Average Outdoor Durability:

Outdoor performance expectations for B-7598 are based on UV resistance testing in the Q-Sun Xenon Test Chamber Model Xe-3 (Daylight Filter, Irradiance 0.35 W/m<sup>2</sup>, Wavelength 340nm, Continuous light at 63°C black panel temperature) and on weatherability testing in the QUV Accelerated Weathering Tester Model QUV/se, according to ASTM G154, Cycle 1. The test results suggest that B-7598 may be used successfully in outdoor environments for a period of up to 10 years depending of the colour. Actual outdoor life of product will depend on user definition of failure, climatic conditions, mounting techniques and material color. See note and warranty statement below for additional information.

Brady B-7598 tag Color/Ribbon	Estimated Outdoor Durability
White/R-6000 Halogen Free Black	10 years
Yellow/R-6000 Halogen Free Black	5 years
Silver/R-6000 Halogen Free Black	5 years
Green/R-6000 Halogen Free Black	5 years
Red/R-6000 Halogen Free Black	5 years
Black/R-4400 White	2 years

PERFORMANCE PROPERTY	CHEMICAL RESISTANCE
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Samples printed with the R-6000 Halogen Free ribbon and dwelled 24 hours prior to test. Testing consisted of 5 cycles of 10 minute immersions in the specified test fluid followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

White B-7598 / R-6000 Halogen Free		
CHEMICAL REAGENT	APPEARANCE of PRINTING BEFORE RUBBING	APPEARANCE of PRINTING AFTER RUBBING
Isopropyl alcohol	1	1
Methyl ethyl ketone	5	5
Alcohol Mix*	1	2
Gasoline	1	5
Diesel	1	1
Skydrol® 500B-4	1	5
Mil 5606 Oil	1	1
5% Sodium Hydroxide	1	1

10% Sulphuric Acid Solution	1	1
Deionized Water	1	1
10% Salt Water Solution	1	1
n-Hexane	1	1
Iso-octane	1	1
Ethanol	1	1
ASTM#3 oil	1	1
Acetone	1	5

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

Samples printed with the R-4400 white ribbon and dwelled 24 hours prior to test. Tested consisted of 5 cycles of 10 minute immersions in the specified test fluid followed by 30 minute recovery periods. After final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

Black B-7598 / R-4400WT		
CHEMICAL REAGENT	APPEARANCE of PRINTING BEFORE RUBBING	APPEARANCE of PRINTING AFTER RUBBING
Isopropyl alcohol	1	5
Methyl ethyl ketone	NP	NP
Alcohol Mix*	1	1
Gasoline	1	5
Diesel	1	1
Skydrol® 500B-4	NP	NP
Mil 5606 Oil	1	1
5% Sodium Hydroxide	1	1
10% Sulphuric Acid Solution	1	1
Deionized Water	1	1
10% Salt Water Solution	1	1
n-Hexane	1	1
lso-octane	1	1
Ethanol	1	4

ASTM#3 oil	1	4
Acetone	NP	NP

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

Rating Scale:

- 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 legible or just barely legible)
- 5 = Complete print and/or topcoat removal
- NP = print removed prior to rub

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 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.) Skydrol® is a registered trademark of the Monsanto Company

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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