



Matte Black Label Stock

TDS No. B-8117

Effective Date: 9/2/2016

Technical Data Sheet

DESCRIPTION

B-8117 is a matte topcoated polyester film coated with a black synthetic rubber based pressure sensitive adhesive, laminated to a silicone release liner.

FEATURES

B-8117 is designed for general industrial identification.

Recommended Ribbons

Brady R6800 series white thermal transfer ribbon

Alternative ribbon

Brady R4400W series white thermal transfer ribbon

REGULATORY/AGENCY APPROVALS

UL & CUL: B-8117 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with Brady Series R6800. See UL file MH25991 for specific details. UL information can be accessed on line at UL.com. Search in Certifications area. The Brady Series R4400 ribbon is also UL approved.

Details:

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	Substrate Adhesive Total	0.0025 inch (0.0635 mm) 0.0010 inch (0.0254 mm) 0.0035 inch (0.0889mm)
Adhesion to:		
Stainless Steel	20 minute dwell	90 oz/in (25.0 N/25mm)
	24 hour dwell	93 oz/in (25.8 N/25mm)
ABS	20 minute dwell	80 oz/in (22.2 N/25mm)
	24 hour dwell	86 oz/in (23.9 N/25mm)
Polycarbonate	20 minute dwell	80 oz/in (22.2 N/25mm)

Acrylic (PMMA)	24 hour dwell	86 oz/in (23.9 N/25mm)
	20 minute dwell	80 oz/in (22.2 N/25mm)
	24 hour dwell	86 oz/in (23.9 N/25mm)
Tack	Polyken™ Probe Tack 1 second dwell	38.8oz (1100g)
Shear Adhesion Failure Temperature (SAFT)	25mm X 25mm X 1 Kg	212°F (100°C)

Performance properties tested on B-8117 printed with R6800, ribbon. Printed samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environments.

PHYSICAL PROPERTIES	TEST METHODS	TYPICAL RESULTS
Long Term High Service Temperature	30 days at 248°F (120°C)	No visible effect.
Low Service Temperature	30 days at 94°F (70°C)	No Visible Effect
Humidity Resistance	30 days at 100°F (37°C), 95% R.H.	No Visible Effect
UV Light Resistance	1000 hours in UV Sunlighter™ 100	No Visible Effect
Weatherability*	ASTM G155, Cycle 1 1000 hours in Xenon Arc Weatherometer	No Visible Effect
Abrasion Resistance	Taber Abraser, CS10 grinding wheels, 250 g/arm	Grade C barcode after 50 cycles
RCA Abrasion	ASTM F235710 175g load	Grade C barcode after 50 cycles
Salt Fog Resistance	30 days in 5% salt fog solution chamber	No Visible Effect

Samples printed with Series R6800 ribbon. Testing was conducted 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 final immersion, samples rubbed 10 times with cotton swab saturated with test fluid.

CHEMICAL REAGENT	EFFECT TO LABEL STOCK	WITHOUT RUB	WITH RUB
Acetone	1	1	5
Toluene	1	1	5
Isopropyl Alcohol	1	1	1
Mineral Spirits	2	1	1
Gasoline	2	1	1
JP8 Jet Fuel	2	1	1
Brake Fluid DOT 3	2	1	3
Skydrol® 500B4	1	1	2
SAE 20 WT Oil at 70°C	1	1	1
MIL 5606 Oil	1	1	1
Formula 409® Cleaner	1	1	1
Northwoods™ Buzz Saw Citrus Degreaser	1	1	1
Deionized Water	1	1	1

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 illegible or just barely legible)

5= complete print and/or topcoat removal

NP= print removed prior to rub

Trademarks:

ASTM: American Society for Testing and Materials (U.S.A.)

All S.I. Units (metric) are mathematically derived from the U.S. Conventional Units

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Polyken™ is a trademark of Testing Machines Inc.

S. I.: International System of Units

SAE: Society of Automotive Engineers (U.S.A.)

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