Technical Data Sheet

BRADY B-6425 MATTE WHITE POLYPROPYLENE LABELSTOCK

TDS No. B-6425
Effective Date: 01/16/2012

Description:
General
Material Type: White Polypropylene
Finish: Matte
Adhesive: Permanent

Recommended Ribbons
Brady Series R4900 - For print on BradyPrinter 600X-Plus
Brady Series R7962 - For print on BradyPrinter 600X-Plus
Brady Series R6000 - Only print by BradyPrinter BP-PR 300 Plus

Applications
Wire and cable marking
Not suitable for long term outdoor use

Compliance
B-6425 is UL recognised as per UL969 standard. Refer to UL file# MH16386 under *Certification* section in the website **www.ul.com**.

B-6425 is RoHS compliant in accordance to the EU Directive 2002/95/EC and its amendments.

Details:

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL RESULTS
Thickness	ASTM D 1000 -Substrate -Adhesive -Total	 0.0028 inch (0.072 mm) 0.0009 inch (0.023 mm) 0.0037 inch (0.095 mm)
Adhesion @ 180deg to: - Stainless Steel - Polypropylene (PP) - Textured ABS - Polyethylene (HDPE)	ASTM D1000 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell	 46 oz/in 53 oz/in 40 oz/in 46 oz/in 13 oz/in 19 oz/in 31 oz/in 33 oz/in
Tensile	ASTM D1000 - Machine	 700 N/100mm
Elongation	ASTM D1000 - Machine	 140%

Samples were printed with Brady Series **R4900 and R7962** ribbons using a BradyPrinterä 600X-Plus thermal transfer printer. Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to various exposures.

PERFORMANCE (AGING) PROPERTIES	TEST METHOD	TYPICAL RESULTS
Humidity Resistance	37degC, 95% RH for 1000hours	No visible effect. Label remained functional.

High Temperature Resistance	100degC for 1000 hours in air oven	Slight yellowing of label surface. Label remained functional.
	80degC for 1000 hours in air oven	No visible effect. Label remained functional.
Low Temperature Resistance	-40degC for 1000 hours	No visible effect. Label remained functional.
UV resistance	ASTM G154 UV exposure for 1000 hours	Label surface showed degradation but print remained legible.
Weathering resistance	ASTM G155 Exposure for 1000 hours	Label shrinkage observed.

Samples were printed with Brady Series **R6000** ribbon using a BradyPrinter BP-PR 300 Plus thermal transfer printer. Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to various exposures.

PERFORMANCE (AGING) PROPERTIES	TEST METHOD	TYPICAL RESULTS
Humidity Resistance	37degC, 95% RH for 1000hours	No visible effect. Label remained functional.
High Temperature Resistance	100degC for 1000 hours in air oven	No visible effect. Label remained functional.
	80degC for 1000 hours in air oven	No visible effect. Label remained functional.
Low Temperature Resistance	-40degC for 1000 hours	No visible effect. Label remained functional.
UV resistance	ASTM G154 UV exposure for 1000 hours	Label surface showed degradation but print remained legible
Weathering resistance	ASTM G155 Exposure for 1000 hours	Label surface showed slight degradation but print remained legible.

Samples were printed with Brady Series **R4900 and R7962** ribbons using a *BradyPrinterä 600X-Plus thermal* transfer printer. Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of 15-minute immersion in specified test fluid. After immersion, the samples were removed from the test fluid and the printed image was rubbed 10 times with a cotton swab saturated with the test fluid. A rating scale of 1 – 5 is used in the table below to show the print quality of the samples tested upon exposure to different chemicals.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE			
	R4900		R7962	
	WITHOUT RUB	WITH RUB	WITHOUT RUB	WITH RUB
Isopropyl alcohol (IPA)	1	5	1	5
Hexane	1	1	1	1
Heptane	1	1	1	1
Toluene	1	5	1	5
Acetone	1	5	1	5
Gasoline	1	5	1	5
Deionised water	1	1	1	1
Mineral spirit	1	1	1	1
10% sodium hydroxide	1	1	1	1
10% sulphuric acid	1	1	1	1
Ethanol	1	5	1	5

Samples were printed with Brady Series **R6000** ribbon using a *BradyPrinter BP-PR 300 Plus* thermal transfer printer. Samples were laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of 15-minute immersion in specified test fluid. After immersion, the samples

were removed from the test fluid and the printed image was rubbed 10 times with a cotton swab saturated with the test fluid. A rating scale of 1 – 5 is used in the table below to show the print quality of the samples tested upon exposure to different chemicals.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE R6000	
	WITHOUT RUB	WITH RUB
Isopropyl alcohol (IPA)	1	5
Hexane	1	1
Heptane	1	1
Toluene	1	5
Acetone	1	5
Gasoline	1	5
Deionised water	1	1
Mineral spirit	1	1
10% sodium hydroxide	1	1
10% sulphuric acid	1	1
Ethanol	1	5

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

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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