

BRADY B-6501 PHOTOLUMINESCENT VINYL LABEL STOCK

TDS No. B-6501

Effective Date: 06/17/2013

Description: GENERAL

Print Technology: Thermal transfer, Silk Screen

Materials Type: Vinyl

Finish: Matte

APPLICATIONS

Identification label for marine industry.

Compliance

DIN67510-1 (After glow intensity after 10min: 54.5mcd/m²

After 60min: 10mcd/m²

(Decay time: 1680min)

VTM-0 rated as per UL94 standard (Internal test)

Details:

PHYSICAL PROPERTIES	TEST METHOD	TYPICAL RESULTS
Thickness	ASTM D1000 Substrate + adhesive (Total)	
	, ,	0.36mm (0.014in)
Adhesion at 180Deg to - Stainless Steel	ASTM D1000 15 minute dwell	
	24 hour dwell	53oz/in Adhesion to the substrate too strong/destroys

Performance properties tested on B-6501 were printed with 2 printing method: 1. JUJO 9000 series ink with silk screen printing and 2. Thermal transfer printing. Printed samples were laminated to aluminum and allowed to dwell 24 hours before exposure to the indicated environment.

PROPERTIES	TEST METHOD	TYPICAL RESULTS (SILK SCREEN)	TYPICAL RESULTS (THERMAL TRANSFER)
Abrasion Resistance	Taber abraser CS10 wheels, 250g	Legibility was good up to 100 cycles	Legibility was good up to 20 cycles
High Service Temperature Resistance	50°C for 1000hours	No visible effect	No visible effect
	60°C for 1000hours	No visible effect	No visible effect
	70°C for 1000hours	Printing remained legible but curling after 1 week aging. Slight yellowing of topcoat after 1000hours.	Printing remained legible but curling after 1 week aging. Slight yellowing of topcoat after 1000hours.
	75°C for 1000hours	Printing remained legible but curling after 20hours aging. Slight yellowing of topcoat after 1000hours	Printing remained legible but curling after 20hours aging. Slight yellowing of topcoat after 1000hours
	80°C for 1000hours	Printing remained legible but curling after 16hours aging. Yellowing of topcoat after 1000hours	Printing remained legible but curling after 16hours aging. Yellowing of topcoat after 1000hours

	90°C for 1000hours	Printing remained legible but curling after 16hours aging. Yellowing of topcoat after 1000hours	Printing remained legible but curling after 16hours aging. Yellowing of topcoat after 1000hours
Low Service Temperature Resistance	-40°C for 1000hours	No visible effect	No visible effect
UV Resistance	ASTM G154 UV exposure for 2000 hours	Printing remained legible but yellowing of topcoat after 1000hours onwards	Printing remained legible but yellowing of topcoat after 1000hours onwards

Samples were printed with 2 printing method: 1. JUJO 9000 series ink with silk screen printing and 2. Thermal transfer printing. Printed samples were laminated to stainless steel panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of 7days 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.

CHEMICAL REAGENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE			
	SILK SCREEN		THERMAL TRANSFER	
	WITHOUT RUB	WITH RUB	WITHOUT RUB	WITH RUB
Diesel Oil	Р	Р	Р	F
SAE 40	Р	Р	Р	Р
Salt water (20% wt)	Р	Р	Р	Р
Water	Р	Р	Р	Р
Ethanol	Р	F	Р	F
10% Sodium Hydroxide	Р	F	Р	Р
10% Sulphuric Acid	Р	Р	Р	Р
Isopropyl Alcohol	Р	F	Р	F
Acetone	F	F	F	F
Hexane	Р	F	Р	F

Remarks

Facestock is away from the adhesive during the immersion in Diesel oil, ethanol, Isopropyl alcohol, acetone and hexane

Samples were printed with 2 printing method: 1. JUJO 9000 series ink with silk screen printing and 2. Thermal transfer printing. Printed samples were rubbed 10 times with a cotton swab saturated with the test fluid.

CHEMICAL DEACENT	SUBJECTIVE OBSERVATION OF VISUAL CHANGE		
CHEMICAL REAGENT	SILK SCREEN	THERMAL TRANSFER	
Diesel Oil	Р	Р	
SAE 40	Р	Р	
Salt water (20% wt)	Р	Р	
Water	Р	Р	
Ethanol	Р	F	
10% Sodium Hydroxide	Р	Р	
10% Sulphuric Acid	Р	Р	
Isopropyl Alcohol	Р	Р	
Acetone	F	F	
Hexane	Р	Р	

Legend: P=Pass F=Fail

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°F (27°C) 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.)

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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