

PERFORMANCE GUIDE

Represents Typical Values Only

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BDE6914

Revised: 01/2024 LEL

2.6 mil White UV BOPP/ MP690 / 3.2 mil SCK

Description	Applications and End Uses		
Product	BDE6914 - 2.6 mil matte top-coated, white UV resistant BOPP with a durable and aggressive permanent acrylic adhesive and a 3.2 SCK liner.		Designed for use in nameplate, durable equipment and drum and battery label applications. Excellent flexo and thermal transfer printability with most resin and wax/resin ribbons.
	<i>Recognized for UL969 component labels. This product is UL and cUL Recognized for indoor and outdoor applications. For specific recognition, consult UL file MH12627 and cUL file MH26726.</i>		
	<i>BS 5609 Compliant. This product conforms to BS 5609: 1986 Section 2 – ‘Marine and Laboratory Performance of Label Base Materials’ and BS 5609: 1986 Section 3 – ‘Laboratory Performance of Printed Labels’.</i>		
Face	2.6 mil UV resistant, white BOPP, topcoated for superior printability via flexo and thermal transfer. Features up to two-year outdoor weather resistance.		
	Physical Properties Without Adhesive		
	Caliper, inches	0.0026 (2.6 mils)	ASTM D-2103
	Tensile, lbs./in.	40 MD 36 CD	TAPPI-494
Adhesive	MP690 is a high performance, high tack, durable, permanent acrylic emulsion with excellent ultimate adhesion and mandrel hold. It is extremely chemical and solvent resistant and has very good adhesion to various high and low energy substrates.		
	Physical Properties of Adhesive		
	Thickness, inches	0.001 +/- 10%	
	Peel Adhesion, lbs./in.	2.9	CTM-8 (30 min. applied) Reference: PSTC-101A
	<i>Temperature Ranges</i>		
	Minimum Application	+50°F (10°C)	CTM #45 Curwood
	Service Ranges	-40°F to +257°F (-40°C to +125°C)	Polyester Film Dry Surface
	Loop Tack – Stainless Steel, lbs./in.	2.9	PSTC11
Liner	A semi-bleached, super-calendared kraft liner. Excellent for die cutting and stripping. The liner is coated with a release system designed for label dispensing. Primarily for roll-to-roll applications where a more demanding liner is needed.		
	Caliper, inches	0.0032+/- 10%	TAPPI T-411
	Basis Weight, lbs. (24" x 36"/500 sheets)	50 +/- 10%	TAPPI T-410
Shelf Life	One year when stored at 72° F and 50% R.H.		

This product complies with CONEG regulations.

All MACTac Roll Label products meet the requirements of the Clean Air Act of 1990.

*** NOTE: Thermal transfer printing quality and bar code scannability are dependent upon the interworking of several elements; the ribbon, the printhead and the facestock. Please test all applications. Consult Mactac's Technical Marketing Department for guidelines regarding printer and ribbon compatibility.**

CALL 1-800-548-3456 for additional product information

Performance Data

Typical peel value of 2 mil PET face applied to tested surface in lbs./in.

Surface	Initial	72 hours @ Room Temp.	72 hours @ 120° F.	24 hours @ 90° F. / 90% RH
Stainless Steel	3.0	5.9	6.8	1.5
Aluminum	3.2	5.8	6.3	3.7
Polypropylene	1.9	3.0	5.5	4.1
HDPE	2.5	5.7	4.1	4.1
LDPE	1.0	2.2	1.8	3.8
ABS	4.5	5.3	5.3	4.3
Polycarbonate	5.4	5.5	2.9	3.3

Chemical Resistance

Typical peel value of 2 mil PET face applied to stainless steel and immersed in test chemicals for four hours, in lbs./in.

Chemical	Adhesion
Isopropyl Alcohol	4.6
Oil	6.4
Oil @ 250° F.	6.4
Water	4.3
Acid – pH 4	5.4
Base – pH 11	5.0
409® Cleaner	5.4
Toluene	2.5
Acetone	2.8
Brake Fluid	6.4
Gasoline	2.8
Diesel Fuel	5.8
Mineral Spirits	5.3
Hydraulic Fluid	6.3
Tide® Detergent	5.7
Kerosene	5.3
Heptane	4.9

Compliance Recognition: UL



Underwriters Laboratories, Inc. BDE6914 2.6M WH UV BOPP TC/MP690-2

Substrates	Minimum Temperature		Maximum Temperature		(I=Indoor Only I/O= Indoor & Outdoor)	Additional Conditions
	° F	° C	° F	° C		
1. Acrylic Paint	-40	-40	212	100	I/O	C,O
2. Alkyd Paint	-40	-40	212	100	I/O	C
3. Aluminum	-40	-40	212	100	I/O	C,O
4. Epoxy Paint	-40	-40	212	100	I/O	C,O
5. Galvanized Steel	-40	-40	212	100	I/O	C,O
6. Polyester Paint	-40	-40	212	100	I/O	C,O
7. Polyester Powder Paint	-40	-40	212	100	I/O	C,O
8. Polyurethane Powder Paint	-40	-40	212	100	I/O	C,O
9. Porcelain	-40	-40	212	100	I/O	C,O
10. Stainless Steel	-40	-40	212	100	I/O	C,O
11. Acrylic Powder Paint	-40	-40	212	100	I/O	C,O
12. Epoxy Powder Paint	-40	-40	212	100	I/O	C,O
13. Melamine	-40	-40	212	100	I/O	C,O
14. Nylon	-40	-40	212	100	I/O	C,O
15. Phenolic	-40	-40	212	100	I/O	C,O
16. Polycarbonate	-40	-40	212	100	I/O	C,O
17. Unsat Thermoset Polyester	-40	-40	212	100	I/O	C,O
18. ABS Plastic	-40	-40	176	80	I/O	C,O
19. Epoxy	-40	-40	176	80	I/O	C,O
20. Polyphenylene Oxide	-40	-40	176	80	I/O	C,O
21. Polypropylene	-9.4	-23	176	80	I/O	C,O
22. Polystyrene	-40	-40	176	80	I/O	C,
23. Polyvinyl Chloride	-40	-40	176	80	I/O	C,O
24. Acrylic	-40	-40	140	60	I/O	C,O
25. Polyethylene	-9.4	-23	140	60	I/O	C,O

C – Occasional exposure to Cooking Oil (room temp).

F1 – Occasional exposure to Fuel Oil No. 1.

G – Occasional exposure to Gasoline splashing.

K – Occasional exposure to Kerosene.

O – Occasional exposure to Lubricating Oil.

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Compliance Recognition: cUL (CSA C22.2 No. 0.15)



Substrates	Maximum Temperature		(I=Indoor Only I/O= Indoor & Outdoor)	Additional Conditions
	° F	° C		
1. Metals	212	100	I/O	C,O
2. Electrostatic coated metal A	212	100	I/O	C,O
3. Electrostatic coated metal B	212	100	I/O	C,O
4. Electrostatic coated metal C	212	100	I/O	C,O
5. Electrostatic coated metal D	212	100	I/O	C,O
6. Plastic Group I	212	100	I/O	-
7. Plastic Group II	176	80	I/O	-
8. Plastic Group III	176	80	I/O	-
9. Plastic Group IV	176	80	I/O	-
10. Plastic Group V	176	80	I/O	-
11. Plastic Group VI	176	80	I/O	-
12. Plastic Group VII	176	80	I/O	-
13. Plastic Group VIII	176	80	I/O	-
14. Porcelain (PRCLN)	212	100	I/O	C,O

Compliance Recognition, Printing Materials: UL PGJ12 / cUL PGJ18

UL Recognized Thermal Transfer Ribbon

DNP (Previously Sony Chemicals) TR6075 Resin Ribbon, DNP R300 Resin Ribbon, DNP V300 Ribbon, DNP TRX-55 Wax-Resin Ribbon, Datamax PGR Wax-Resin Ribbon, Datamax SDR-D Resin Ribbon, and Datamax IQMID+ Wax-Resin Ribbon, Fuji Copian FTX 308 Resin Ribbon, ITW M95/B128 Wax-Resin Ribbon, limak SP330, ARMOR AXR7+

UL Recognized Digital Inks

EFI "JetTron Series" UV Ink Set (All Colors)
INX Digital International NWUV UV Inkjet Series

Compliance Recognition, Marking & Labeling Materials: UL PGGU2 / cUL PGGU8

UL Recognized Flexo Inks

ACTega WIT Versifilm Plus Series (Water based), ACTega WIT Optafilm Series (Water based) and ACTega WIT Pharmaflex UV ULF (UV Ink System), Environmental Inks Film III Series, Flint Group Narrow Web Flexocure FORCE (UV Ink System) and Flint Group Hydrofilm ACE (Water based) Series

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