

PERFORMANCE GUIDE

Represents Typical Values Only

www.mactac.com

FFD6914N

Revised: 03/2022 CNS

2 mil Matte Silver Metalized PET / MP690 / 3.2 mil SCK

Description		Applications and End Uses	
Product	FFD6914N - 2 mil matte top-coated, silver metalized polyester with a durable and aggressive permanent acrylic adhesive and a 3.2 SCK liner.		Designed for use in nameplate, durable equipment, and drum label applications. Excellent flexo and thermal transfer printability with most resin and wax/resin ribbons.
	Recognized for UL969 component labels. This product is UL Recognized for indoor and outdoor applications. For specific recognition, consult UL file No. PGGU2.MH12627 Marking and Labeling Systems Materials and PGJ12.MH26726 Printing Materials.		
	CUL recognized under UL file No. PGGU8.MH12627 Marking and Labeling System Materials Certified for Canada and PGJ18.MH26726 Printing Materials.		
Face	2 mil matte silver metalized polyester, topcoated for superior printability via flexo and thermal transfer. Features high strength, tear resistance, dimensional stability, and temperature resistance.		
	Physical Properties Without Adhesive		
	Caliper, inches	0.002 (2 mils)	ASTM D-2103
	Tensile, lbs./in.	40 MD 60 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	PSTC-101A (30 min. applied)
	Temperature Ranges		
	Minimum Application	+50°F (10°C)	CTM #45 Curwood
	Service Ranges	-40°F to +302°F (-40°C to +150°C)	Polyester Film Dry Surface
	Loop Tack – Stainless Steel, lbs./in.	2.9	PSTC-16
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	Product retains its performance and properties for two years from date of manufacture when stored at 72° F and 50% relative humidity.		

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

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

Compliance Recognition: UL



Underwriters Laboratories, Inc.

Substrates	Minimum Temperature		Maximum Temperature		(I=Indoor Only I/O= Indoor & Outdoor)	Additional Conditions
	° F	° C	° F	° C		
1. Acrylic Paint	-40	-40	302	150	I/O	C,F1,G,K,O
2. Alkyd Paint	-40	-40	302	150	I/O	C,F1,G,K,O
3. Aluminum	-40	-40	302	150	I/O	C,F1,G,K,O
4. Epoxy Paint	-40	-40	302	150	I/O	C,F1,G,K,O
5. Galvanized Steel	-40	-40	302	150	I/O	C,F1,G,K,O
6. Polyester Paint	-9.4	-23	302	150	I/O	C,F1,G,K,O
7. Polyester Powder Paint	-9.4	-23	302	150	I/O	C,F1,G,K,O
8. Polyurethane Powder Paint	-9.4	-23	302	150	I/O	C,F1,G,K,O
9. Porcelain	-40	-40	302	150	I/O	C,F1,G,K,O
10. Stainless Steel	-40	-40	302	150	I/O	C,F1,G,K,O
11. Acrylic Powder Paint	-40	-40	257	125	I/O	C,F1,G,K,O
12. Epoxy Powder Paint	-40	-40	257	125	I/O	C,F1,G,K,O
13. Melamine	-40	-40	212	100	I/O	C,F1,G,K,O
14. Nylon	-40	-40	212	100	I/O	C,F1,G,K,O
15. Phenolic	-40	-40	212	100	I/O	C,F1,G,K,O
16. Polycarbonate	-40	-40	212	100	I/O	C,F1,G,K,O
17. Unsat Thermoset Polyester	-40	-40	212	100	I/O	C,F1,G,K,O
18. ABS Plastic	-40	-40	176	80	I/O	C,F1,G,K,O
19. Epoxy	-40	-40	176	80	I/O	C,F1,G,K,O
20. Polyphenylene Oxide	-40	-40	176	80	I/O	C,F1,G,K,O
21. Polypropylene	-9.4	-23	176	80	I/O	C,F1,G,K,O
22. Polystyrene	-40	-40	176	80	I/O	C,F1,G,K,O
23. Polyvinyl Chloride	-40	-40	176	80	I/O	C,F1,G,K,O
24. Acrylic	-40	-40	140	60	I/O	C,F1,G,K,O
25. Polyethylene	-9.4	-23	140	60	I/O	C,F1,G,K,O

Compliance Recognition, Inks: UL PGJ12

UL Recognized Thermal Transfer Ribbon

Label materials suitable for additional printing using one or more of the following inks:

DNP "TR4070", "R510HF", "R300", "TR6075", "TR6070", "Signature Series Resin" "R550"; Datamax "SDR", "SDR-D", "SDR-5", "IQRES+" Resin Ribbon, ITW "B324"; Iimac "SP330" thermal transfer ribbon; ARMOR AXR7+; Zebra "5100", "5095" thermal transfer ribbon

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

UL Recognized Digital Inks

EFI "Jettrion Series" UV Ink Set (Black, Blue, Red), INX Digital International NWUV UV Inkjet Series (All Colors)

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

Substrates	Maximum Temperature		(I=Indoor Only I/O= Indoor & Outdoor)	Additional Conditions
	° F	° C		
1. Metals	302	150	I/O	C,G,K,O
2. Electrostatic coated metal A	302	150	I/O	C,G,K,O
3. Electrostatic coated metal B	257	125	I/O	C,G,K,O
4. Electrostatic coated metal C	257	125	I/O	C,G,K,O
5. Electrostatic coated metal D	302	150	I/O	C,G,K,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)	302	150	I/O	C,G,K,O

Compliance Recognition, Inks: UL PGJ18

cUL Recognized Thermal Transfer Ribbon

limak "SP330" thermal transfer ribbon, ARMOR AXR7+

cUL Recognized Digital Inks

INX Digital International NWUV UV Inkjet Series (All Colors), EFI Jetrion UV Inkjet

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.

IMPORTANT NOTICE: The information given, and the recommendations made herein are based on our research and are believed to be accurate, but no guarantee of their accuracy or completeness is made. In every case, user shall determine before using any product in full scale production, or in any way, whether such product is suitable for user's intended use for their particular purpose under their own operating conditions. User assumes all risk and liability whatsoever in connection with their use of any product. The products discussed herein are sold without any warranty as to merchantability or fitness for a particular purpose, or any other warranty, express or implied. No representative of ours has any authority to waive or change the foregoing provisions, and no statement or recommendation not contained herein shall have any force of effect unless in an agreement signed by the officers of seller and manufacturer. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement, or recommendation to practice any invention covered by any patent without authority from the owner of the patent. The following is made in lieu of all warranties, express or implied: Seller's and manufacturer's only obligation shall be to replace or credit such quantity of the product proved to be defective at its discretion.

TM Trademark of Morgan Adhesives Company.

* Registered Trademark of Morgan Adhesives Company.

Tide Registered Trademark of the Procter & Gamble Company

409[®] Registered Trademark of the Clorox Company