

### FJD6914

Revised: 03/2022 CNS

### 2 mil Reverse Void Silver Metalized PET / MP690 / 3.2 mil SCK

Description	Applications and End Uses		
<b>Product</b> FJD6914 - 2 mil gloss top-coated, reverse void silver metalized polyester with a durable and aggressive permanent acrylic adhesive and a 3.2 SCK liner used for tamper evident labeling. When the label is removed from the substrate the metalizing splits from the polyester film leaving the imprinted "void" pattern showing undeniable evidence of tampering.  <i>Recognized for UL969 component labels. This product is UL Recognized for indoor and outdoor applications. For specific recognition, consult UL file MH12627.</i>	Designed for use in nameplate, durable equipment and drum label tamper evident applications. Excellent flexo and thermal transfer printability with most resin and wax/resin ribbons.		
<b>Face</b> 2 mil reverse void silver metalized polyester, topcoated for superior printability via flexo and thermal transfer. Features high strength, tear resistance, dimensional stability, and temperature resistance. Do not expose product to processing conditions above 240F for periods of 30 seconds or more.  <b>Physical Properties Without Adhesive</b>			
Caliper, inches	0.002 (2 mils)		ASTM D-2103
Tensile, lbs./in.	40 MD 60 CD		TAPPI-494
<b>Adhesive</b> MP690 is a high performance, durable, permanent acrylic emulsion with aggressive initial tack, 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.  <b>Physical Properties of Adhesive</b>			
Thickness, inches	0.001 +/- 10%		
Peel Adhesion, lbs./in.	2.9		PSTC-101A
<i>Temperature Ranges</i>			
Minimum Application	+40°F (5°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
<b>Liner</b> 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
<b>Shelf Life</b> 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.**

## 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	4.0	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

\*Breakaway of void will occur around 1 lb.

## 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, Inks: UL PGJI2

### UL Recognized Thermal Transfer Ribbon

DNP "TR4070", "R510HF", "R300", "V300", "TR6075", "TR6070", "Signature Series Resin", "R550"; Datamax "SDR", "SDR-D", "SDR-5", "IQRES+" Resin Ribbon; ITW "B324"; limak "SP330" thermal transfer ribbon; ARMOR AXR7+; Zebra "5100", "5095" thermal transfer ribbon

## 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. Galvanized Steel	-40	-40	302	150	I/O	C,F1,G,K,O
5. Polyester Paint	-9.4	-23	302	150	I/O	C,F1,G,K,O
6. Polyester Powder Paint	-9.4	-23	302	150	I/O	C,F1,G
7. Polyurethane Powder Paint	-9.4	-23	302	150	I/O	C,F1,G,K
8. Porcelain	-40	-40	302	150	I/O	C,F1,G,K,O
9. Stainless Steel	-40	-40	302	150	I/O	C,F1,G,K,O
10. Acrylic Powder Paint	-40	-40	257	125	I/O	C,F1,G,K,O
11. Epoxy Powder Paint	-40	-40	257	125	I/O	C,F1,G,K,O
12. Melamine	-40	-40	212	100	I/O	C,F1,G,K,O
13. Nylon	-40	-40	212	100	I/O	C,F1,G,K,O
14. Phenolic	-40	-40	212	100	I/O	C,F1,G,K,O
15. Polycarbonate	-40	-40	212	100	I/O	C,F1,G,K,O
16. Unsat Thermoset Polyester	-40	-40	212	100	I/O	C,F1,G,K,O
17. ABS Plastic	-40	-40	176	80	I/O	C,F1,G,K,O
18. Epoxy	-40	-40	176	80	I/O	C,F1,G,K,O
19. Polyphenylene Oxide	-40	-40	176	80	I/O	C,F1,G,K,O
20. Polypropylene	-9.4	-23	176	80	I/O	C,F1,G,K,O
21. Polystyrene	-40	-40	176	80	I/O	C,F1,G,K,O
22. Polyvinyl Chloride	-40	-40	176	80	I/O	C,F1,G,K,O
23. Acrylic	-40	-40	140	60	I/O	C,F1,G,K,O
24. Polyethylene	-9.4	-23	140	60	I/O	C,F1,G,K,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.

**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.

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