



PERFORMANCE GUIDE

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FAD6914 2 mil Clear PET / MP690 / 3.2 mil SCK

Revised: 06/2020 KSH

| Description | Applications and End Uses | | | | | | | | | | | | | | | | | | |
|--|---|--|-------------|---|-------------|----------------------------|---------------------------|--|--|---------------------|--------------|--|----------------|-----------------------------------|--|---------------------------------------|-----|---------|--|
| <p>Product FAD6914 - 2 mil gloss top-coated, clear polyester with a durable and aggressive permanent acrylic adhesive and a 3.2 SCK liner.</p> <p><i>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.</i></p> <p><i>CUL (CSA C22.2 No. 0.15) recognized under UL file No. PGGU8.MH12627 Marking and Labeling System Materials Certified for Canada and PGJ18.MH26726 Printing Materials.</i></p> | <p>Designed for use in nameplate, durable equipment and drum label applications. Excellent flexo and thermal transfer printability with most resin and wax/resin ribbons.</p> | | | | | | | | | | | | | | | | | | |
| <p>Face 2 mil clear polyester, topcoated for superior printability via flexo and thermal transfer. Features high strength, tear resistance, dimensional stability and temperature resistance.</p> <p>Physical Properties Without Adhesive</p> <table border="1"> <tr> <td>Caliper, inches</td> <td>0.002 (2 mils)</td> <td>ASTM D-2103</td> </tr> <tr> <td>Tensile, lbs./in.</td> <td>60 MD 70 CD</td> <td>TAPPI-494</td> </tr> </table> | Caliper, inches | 0.002 (2 mils) | ASTM D-2103 | Tensile, lbs./in. | 60 MD 70 CD | TAPPI-494 | | | | | | | | | | | | | |
| Caliper, inches | 0.002 (2 mils) | ASTM D-2103 | | | | | | | | | | | | | | | | | |
| Tensile, lbs./in. | 60 MD 70 CD | TAPPI-494 | | | | | | | | | | | | | | | | | |
| <p>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.</p> <p>Physical Properties of Adhesive</p> <table border="1"> <tr> <td>Thickness, inches</td> <td>0.001 +/- 10%</td> <td></td> </tr> <tr> <td>Peel Adhesion, lbs./in.</td> <td>3.8</td> <td>PSTC-101A (30mins applied)</td> </tr> <tr> <td colspan="3"><i>Temperature Ranges</i></td> </tr> <tr> <td>Minimum Application</td> <td>+50°F (10°C)</td> <td>CTM #45 Curwood Polyester Film Dry Surface</td> </tr> <tr> <td>Service Ranges</td> <td>-40°F to +302°F (-40°C to +150°C)</td> <td></td> </tr> <tr> <td>Loop Tack – Stainless Steel, lbs./in.</td> <td>3.8</td> <td>PSTC-16</td> </tr> </table> | Thickness, inches | 0.001 +/- 10% | | Peel Adhesion, lbs./in. | 3.8 | PSTC-101A (30mins applied) | <i>Temperature Ranges</i> | | | Minimum Application | +50°F (10°C) | CTM #45 Curwood Polyester Film Dry Surface | Service Ranges | -40°F to +302°F (-40°C to +150°C) | | Loop Tack – Stainless Steel, lbs./in. | 3.8 | PSTC-16 | |
| Thickness, inches | 0.001 +/- 10% | | | | | | | | | | | | | | | | | | |
| Peel Adhesion, lbs./in. | 3.8 | PSTC-101A (30mins applied) | | | | | | | | | | | | | | | | | |
| <i>Temperature Ranges</i> | | | | | | | | | | | | | | | | | | | |
| Minimum Application | +50°F (10°C) | CTM #45 Curwood Polyester Film Dry Surface | | | | | | | | | | | | | | | | | |
| Service Ranges | -40°F to +302°F (-40°C to +150°C) | | | | | | | | | | | | | | | | | | |
| Loop Tack – Stainless Steel, lbs./in. | 3.8 | PSTC-16 | | | | | | | | | | | | | | | | | |
| <p>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.</p> <table border="1"> <tr> <td>Caliper, inches</td> <td>0.0032 +/- 10%</td> <td>TAPPI T-411</td> </tr> <tr> <td>Basis Weight, lbs. (24" x 36"/500 sheets)</td> <td>50 +/- 10%</td> <td>TAPPI T-410</td> </tr> </table> | Caliper, inches | 0.0032 +/- 10% | TAPPI T-411 | Basis Weight, lbs. (24" x 36"/500 sheets) | 50 +/- 10% | TAPPI T-410 | | | | | | | | | | | | | |
| Caliper, inches | 0.0032 +/- 10% | TAPPI T-411 | | | | | | | | | | | | | | | | | |
| Basis Weight, lbs. (24" x 36"/500 sheets) | 50 +/- 10% | TAPPI T-410 | | | | | | | | | | | | | | | | | |
| <p>Shelf Life Product retains its performance and properties for two years from date of manufacture when stored at 72° F and 50% relative humidity.</p> | | | | | | | | | | | | | | | | | | | |

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.

| 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 |

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.

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

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 | 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 PGJ12 / cUL PGJ18

UL Recognized Thermal Transfer Ribbon

DNP (Previously Sony Chemicals) TR6070 Resin Ribbon, DNP R510 Resin Ribbon, Datamax SDR-5 Resin Ribbon, and Datamax IQRES+ Resin 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 “Jetrion Series” UV Ink Set (All Colors)

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