

DURABLE FILMS

UL RECOGNIZED COMPONENTS GUIDE

A trusted resource across the globe for product safety certification and compliance solutions.

From Mactac®

Mactac's Customer Ready UL Recognized Durable Films Portfolio

Ensures fast market access by reducing converters' cost and time spent qualifying substrates. For a flat fee, converters can adopt any UL-certified durable product for UL recognized label applications and receive approval for the flexo inks and the thermal transfer ribbon.

- No additional UL testing required – paper transfer only
- Instant entry into the durable goods labeling market
- Pre certified ink-substrate performance
- Saves 12 weeks of inconvenient testing!

Products Tested

VDG6911	3.4 mil white vinyl
BDE6914	2.6 mil white polypropylene
BDF6914	3.0 mil white polypropylene
FAB6914	1.0 mil clear polyester
FAD6914	2.0 mil clear polyester
FCD6914	2.0 mil gloss white polyester
FED6914	2.0 mil bright silver polyester
FFD6914N	2.0 mil matte silver polyester
FGD6914N	2.0 mil brushed silver polyester
FJD6914	2.0 mil reverse void silver polyester

UL Recognized Thermal Transfer Resin Ribbons - pages 14-15

DNP R300, DNP R510, DNP TR6075, DNP TR4070, DNP TR6070, DNP Signature Series
Zebra 5100, Zebra 5095
iimak SP330
Fuji Copian FTX 308
ITW B324
DATAMAX SDR, DATAMAX SDR-D, DATAMAX SDR-5, DATAMAX IQRES+

UL Recognized Thermal Transfer Wax-Resin Ribbons - pages 14-15

DNP TRX-55
ITW B128/M95
DATAMAX IQMID+, DATAMAX PGR

UL Recognized Flexo Inks - pages 10-13

ACTEGA WIT Versifilm Plus ULF Series, Optafilm Series, Pharmaflex UV ULF
Environmental Inks & Coatings Film III Series
Flint Group Narrow Web Flexocure FORCE, Hydrofilm ACE

UL Recognized Digital Inks - pages 14-15

EFI Jetrion Series UV Ink Jet
INX Digital International NWUV UV Ink jet Series

DURABLE FILMS

Select a label stock that satisfies your application requirements

UL & C-UL Recognized DURABLE Overlaminates:

Product Number	Face	Color	Finish	Adhesive	Liner	Min. App. Temperature	Service Range	Outdoor Durability	Cost Requirement
FAB6914	1.0 Mil Clear PET	Clear	Gloss	MP690	3.2 SCK	+50°F	-40°F to 302°F	2 Years	Moderate

UL & C-UL Recognized DURABLE Base Material:

BDE6914	2.6 Mil BOPP	White	Matte	MP690	3.2 SCK	+50°F	-40°F to 257°F	Up to 2 Years	Low
BDF6914	3 Mil BOPP	White	Matte	MP690	3.2 SCK	+50°F	-40°F to 200°F	6 Months - 1 Year	Low
VDG6911	3.4 Mil Flexible Vinyl	White	Matte	MP690	3.2 SCK	+50°F	-40°F to 200°F	5 Years	Low
FAD6914	2 Mil PET	Clear	Gloss	MP690	3.2 SCK	+50°F	-40°F to 302°F	2+ Years	Moderate
FCD6914	2 Mil PET	White	Gloss	MP690	3.2 SCK	+50°F	-40°F to 302°F	2 Years	Moderate
FED6914	2.0 Mil Metalized PET	Bright Silver	Gloss	MP690	3.2 SCK	+50°F	-40°F to 302°F	2+ Years	Moderate
FFD6914N	2.0 Mil Metalized PET	Silver	Matte	MP690	3.2 SCK	+50°F	-40°F to 302°F	2+ Years	Moderate
FGD6914N	2.0 Mil Metalized PET	Brushed Silver	Gloss	MP690	3.2 SCK	+50°F	-40°F to 302°F	2+ Years	Premium
FJD6914	2.0 Mil Metalized PET	Reverse Void Silver	Gloss	MP690	3.2 SCK	+50°F	-40°F to 302°F	2+ Years	Premium

Note: All products are offered on Mactac Precise Program.

DURABLE FILMS

Polypropylene/BOPP — UL & C-UL Certified Conditions

BDE6914 2.6 Mil Matte Top-coated White BOPP | MP690 Adhesive | 3.2 SCK Liner

Substrate	Temperature °F		Temperature °C		Indoor/Outdoor	Additional Conditions
	Min.	Max.	Min.	Max.		
ABS Plastic	-40 °F	176 °F	-40 °C	80 °C	I/O	C,O
Acrylic	-40 °F	140 °F	-40 °C	60 °C	I/O	C,O
Acrylic Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,K,O
Acrylic Powder Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,O
Alkyd Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C
Aluminum	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O
Epoxy	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,O
Epoxy Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,K,O
Epoxy Powder Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O
Galvanized Steel	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O
Melamine	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,K,O
Nylon	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O
Phenolic	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O
Polycarbonate	-40 °F	212 °F	-40 °C	100 °C	I/O	C,O
Polyester Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,O
Polyester Powder Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,O
Polyethylene	-9.4 °F	140 °F	-23 °C	60 °C	I/O	C,F1,O
Polyphenylene Oxide	-40 °F	176 °F	-40 °C	80 °C	I/O	C,K,O
Polypropylene	-9.4 °F	176 °F	-23 °C	80 °C	I/O	C,O
Polystyrene	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K
Polyurethane Powder Paint	-40 °F	212 °F	-40 °C	100 °C	I/O	C,O
Polyvinyl Chloride	-40 °F	176 °F	-40 °C	80 °C	I/O	C,O
Porcelain	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O
Stainless Steel	-40 °F	212 °F	-40 °C	100 °C	I/O	C,F1,O

Substrate	Temperature °F	Temperature °C	Indoor/Outdoor	Additional Conditions
Metals	212 °F	100 °C	I/O	C,O
Electrostatic coated metal A	212 °F	100 °C	I/O	C,O
Electrostatic coated metal B	212 °F	100 °C	I/O	C,O
Electrostatic coated metal C	212 °F	100 °C	I/O	C,O
Electrostatic coated metal D	212 °F	100 °C	I/O	-
Plastic Group I	212 °F	100 °C	I/O	-
Plastic Group II	176 °F	80 °C	I/O	-
Plastic Group III	176 °F	80 °C	I/O	-
Plastic Group IV	176 °F	80 °C	I/O	-
Plastic Group V	176 °F	80 °C	I/O	-
Plastic Group VI	176 °F	80 °C	I/O	-
Plastic Group VII	176 °F	80 °C	I/O	-
Plastic Group VIII	176 °F	80 °C	I/O	-
Porcelain (PRCLN)	212 °F	100 °C	I/O	C,O

BDF6914 3.0 Mil Matte Top-coated White BOPP | MP690 Adhesive | 3.2 SCK Liner

Substrate	Temperature °F		Temperature °C		Indoor/Outdoor	Additional Conditions
	Min.	Max.	Min.	Max.		
ABS Plastic	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,G,K,O
Acrylic	-40 °F	140 °F	-40 °C	60 °C	I/O	C,F1,G,K,O
Acrylic Paint	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Acrylic Powder Paint	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Epoxy	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,G,O
Epoxy Paint	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Epoxy Powder Paint	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Galvanized Steel	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Melamine	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,O
Nylon	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Phenolic	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Polycarbonate	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Polyester Paint	-40 °F	176 °F	-40 °C	80 °C	I	C,G,K,O
Polyester Powder Paint	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,K,O
Polyethylene	-9.4 °F	140 °F	-23 °C	60 °C	I/O	C,F1,G,K,O
Polyphenylene Oxide	-40 °F	176 °F	-23 °C	80 °C	I/O	C,F1,G,K,O
Polypropylene	-9.4 °F	176 °F	-40 °C	80 °C	I/O	C,F1,G,O
Polystyrene	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,G,K,O
Polyvinyl Chloride	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,G,O
Unsat Thermoset Polyester	-40 °F	176 °F	-40 °C	80 °C	I	C,F1,G,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

DURABLE FILMS

Vinyl/PVC — UL & C-UL Certified Conditions

VDG6911 3.4 Mil Matte Top-Coated, White Flexible PVC | MP690 Adhesive | 3.2 SCK Liner

Substrate	Temperature °F		Temperature °C		Indoor/Outdoor	Additional Conditions
	Min.	Max.	Min.	Max.		
ABS Plastic	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Acrylic	-40 °F	140 °F	-40 °C	60 °C	I/O	C,F1,K,O
Acrylic Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Acrylic Powder Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Alkyd Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Aluminum	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Epoxy	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Epoxy Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Epoxy Powder Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Galvanized Steel	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Melamine	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Nylon	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Phenolic	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Polycarbonate	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Polyester Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Polyester Powder Paint	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Polyethylene	-9.4 °F	140 °F	-23 °C	60 °C	I/O	C,F1,K,O
Polyphenylene Oxide	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Polypropylene	-9.4 °F	176 °F	-23 °C	80 °C	I/O	C,F1,K,O
Polystyrene	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Polyvinyl Chloride	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Porcelain	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O
Stainless Steel	-40 °F	176 °F	-40 °C	80 °C	I/O	C,F1,K,O

Vinyl/PVC — C-UL Certified Conditions

Substrate	Temperature °F	Temperature °C	Indoor/Outdoor	Additional Conditions
Metals	176 °F	80 °C	I/O	C,K,O
Electrostatic coated metal A	176 °F	80 °C	I/O	C,K,O
Electrostatic coated metal B	176 °F	80 °C	I/O	C,K,O
Electrostatic coated metal C	176 °F	80 °C	I/O	C,K,O
Electrostatic coated metal D	176 °F	80 °C	I/O	C,K,O
Plastic Group I	176 °F	80 °C	I/O	-
Plastic Group II	176 °F	80 °C	I/O	-
Plastic Group III	176 °F	80 °C	I/O	-
Plastic Group IV	176 °F	80 °C	I/O	-
Plastic Group V	176 °F	80 °C	I/O	-
Plastic Group VI	176 °F	80 °C	I/O	-
Plastic Group VII	176 °F	80 °C	I/O	-
Plastic Group VIII	176 °F	80 °C	I/O	-
Porcelain (PRCLN)	176 °F	80 °C	I/O	C,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



DURABLE FILMS

PET Polyester — UL Certified Conditions

FAD6914 4.2 Mil Gloss Top-coated, Clear PET | MP690 Adhesive | 3.2SCK
FCD6914 2.0 Mil Gloss Top-coated, White PET | MP690 Adhesive | 3.2SCK
FED6914 4.2 Mil Gloss Top-coated, Bright Silver Metalized PET | MP690 Adhesive | 3.2SCK
FGD6914N 2.0 Mil Gloss Top-coated, Brushed Silver Metalized PET | MP690 Adhesive | 3.2SCK
FJD6914 2.0 Mil Top-coated, Reverse Void PET | MP690 Adhesive | 3.2SCK (*No C-UL)
FFD6914N 2.0 Mil Matte Top-coated, Silver Metalized PET | MP690 Adhesive

Substrate	Temperature °F		Temperature °C		Indoor/Outdoor	Additional Conditions
	Min.	Max.	Min.	Max.		
Stainless Steel	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
ABS Plastic	-40 °F	176 °F	-40 °C	80 °C	I/O	C, Fl, G, K, O
Acrylic	-40 °F	140 °F	-40 °C	60 °C	I/O	C, Fl, G, K, O
Acrylic Paint	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
Acrylic Powder Paint	-40 °F	257 °F	-40 °C	125 °C	I/O	C, Fl, G, K, O
Alkyd Paint	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
Aluminum	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
Epoxy	-40 °F	176 °F	-40 °C	80 °C	I/O	C, Fl, G, K, O
Epoxy Paint	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
Epoxy Powder Paint	-40 °F	257 °F	-40 °C	125 °C	I/O	C, Fl, G, K, O
Galvanized Steel	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
Melamine	-40 °F	212 °F	-40 °C	100 °C	I/O	C, Fl, G, K, O
Nylon	-40 °F	212 °F	-40 °C	100 °C	I/O	C, Fl, G, K, O
Phenolic	-40 °F	212 °F	-40 °C	100 °C	I/O	C, Fl, G, K, O
Polycarbonate	-40 °F	212 °F	-40 °C	100 °C	I/O	C, Fl, G, K, O
Polyester Paint	-9.4 °F	302 °F	- 23 °C	150 °C	I/O	C, Fl, G, K, O
Polyester Powder Paint	-9.4 °F	302 °F	- 23 °C	150 °C	I/O	C, Fl, G, K, O
Polyethylene	-9.4 °F	140 °F	- 23 °C	60 °C	I/O	C, Fl, G, K, O
Polyphenylene Oxide	-40 °F	176 °F	-40 °C	80 °C	I/O	C, Fl, G, K, O
Polypropylene	-9.4 °F	176 °F	- 23 °C	80 °C	I/O	C, Fl, G, K, O
Polystyrene	-40 °F	176 °F	-40 °C	80 °C	I/O	C, Fl, G, K, O
Polyurethane Powder Paint	-9.4 °F	302 °F	- 23 °C	150 °C	I/O	C, Fl, G, K, O
Polyvinyl Chloride	-40 °F	176 °F	-40 °C	80 °C	I/O	C, Fl, G, K, O
Porcelain	-40 °F	302 °F	-40 °C	150 °C	I/O	C, Fl, G, K, O
Unsat Thermoset Polyester	-40 °F	212 °F	-40 °C	100 °C	I/O	C, Fl, G, K, O

PET Polyester — C-UL Certified Conditions

Substrate	Temperature °F	Temperature °C	Indoor/Outdoor	Additional Conditions
Metals	302 °F	150 °C	I/O	C, G, K, O
Electrostatic coated metal A	302 °F	150 °C	I/O	C, G, K, O
Electrostatic coated metal B	257 °F	125 °C	I/O	C, G, K, O
Electrostatic coated metal C	257 °F	126 °C	I/O	C, G, K, O
Electrostatic coated metal D	302 °F	150 °C	I/O	C, G, K, O
Plastic Group I	212 °F	100 °C	I/O	-
Plastic Group II	176 °F	80 °C	I/O	-
Plastic Group III	176 °F	80 °C	I/O	-
Plastic Group IV	176 °F	80 °C	I/O	-
Plastic Group V	176 °F	80 °C	I/O	-
Plastic Group VI	176 °F	80 °C	I/O	-
Plastic Group VII	176 °F	80 °C	I/O	-
Plastic Group VIII	176 °F	80 °C	I/O	-
Porcelain (PRCLN)	302°F	150 °C	I/O	C, 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



DURABLE FILMS

UL Inks - Approved without Overlaminates

BDE6914 2.6 Mil Matte Top-coated, White BOPP MP690 Adhesive 3.2 SCK	VDG6911 3.4 Mil Matte Top-coated White Flexible PVC MP690 Adhesive 3.2 SCK
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	Manufacturer	Inks	Indoor	Outdoor	Add. Conditions	Indoor	Outdoor	Add. Conditions
UL Recognition	Flint Group Narrow Web	Flexocure FORCE	All Colors	All Colors	C, O	All Colors	All Colors	C, F1, K, O
	Flint Group Narrow Web	HydroFilm ACE	All Colors	All Colors	C, O	All Colors	All Colors	C, F1, K, O
	ACTEGA WIT	Versifilm Plus ULF	All Colors	All Colors	C, O	All Colors	All Colors	C, F1, K, O
	ACTEGA WIT	Optafilm ULF	All Colors	All Colors	C, O	All Colors	All Colors	C, F1, K, O
	ACTEGA WIT	Pharmaflex UV ULF	All Colors	All Colors	C, O	All Colors	All Colors	C, F1, K, O
	Environmental Inks & Coatings	Film III	All Colors	BK, BL, RD, GN	C, O	All Colors	BK, BL, RD, GN	C, F1, K, O
c - UL Recognition	Flint Group Narrow Web	Flexocure FORCE	All Colors	All Colors	C,O	-	-	-
	Flint Group Narrow Web	HydroFilm ACE	All Colors	All Colors	C, O	-	-	-
	ACTEGA WIT	Versifilm Plus ULF	All Colors	All Colors	C, O	-	-	-
	ACTEGA WIT	Optafilm ULF	All Colors	All Colors	C, O	-	-	-
	ACTEGA WIT	Pharmaflex UV ULF	All Colors	All Colors	C, O	BL, RD, YL, GN	BL, RD, YL, GN	C, K, O
	Environmental Inks & Coatings	Film III	BL, RD, GN	BL, RD, GN	C, O	BK, BL, RD, GN	BK, BL, RD, GN	C,O

BK Black, **BL** Blue, **RD** Red, **YL** Yellow

- 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

FAD6914 2.0 Mil Gloss Top-coated, Clear PET MP690 Adhesive 3.2SCK	FCD6914 2.0 Mil Gloss Top-coated White PET MP690 Adhesive 3.2SCK	FED6914 2.0 Gloss Top-coated Bright Silver Metalized PET MP690 Adhesive
		FFD6914N 2.0 Mil Matte Top-coated, Silver Metalized PET MP690 Adhesive
		FGD6914 N 2.0 Mil Gloss Top-coated Brushed Silver Metalized PET MP690 Adhesive
		FJD6914 * 2.0 Mil Top-coated Reverse Void PET MP690 Adhesive

Indoor	Outdoor	Add. Conditions	Indoor	Outdoor	Add. Conditions	Indoor	Outdoor	Add. Conditions
All Colors	All Colors	C, F1, K, O, G	All Colors	All Colors	C, F1, K, O, G	All Colors	All Colors	C, F1, K, O, G
BK, RD, GN	BK, RD, GN	C, F1, K, O, G	BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O, G	All Colors	All Colors	C, F1, K, O, G
BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O						
BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O, G	BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O, G	All Colors	All Colors	C, F1, K, O, G
BK, RD, GN	BK, RD, GN	C, F1, K, O, G	All Colors	All Colors	C, F1, O, G	All Colors	All Colors	C, F1, K, O, G
BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O						
BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O, G	All Colors	All Colors	C, F1, K, O, G	All Colors	All Colors	C, F1, K, O, G
BK, BL, RD, GN	BK	C, F1, K, O, G	BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O, G	All Colors	BK, BL, RD, GN	C, F1, K, O, G
All Colors	All Colors	C, K, O	All Colors	All Colors	C, F1, K, O	All Colors	All Colors	C, F1, K, O
-	-	-	BK, BL, RD, GN	BK, BL, RD, GN	C, F1, O	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
BK, BL, RD, GN	BK, BL, RD, GN	C, F1, K, O	BL, RD, GN, YL	BL, RD, GN, YL	C, F1, K, O	All Colors	All Colors	C, FL, K, O
-	-	-	BL, GN	BL, GN	C, F1, O	-	-	-

* US Only

DURABLE FILMS

UL Inks - Approved with FAB6914 Overlamination

Flexo

VDG6911
3.4 Mil Matte Top-coated,
White Flexible PVC
MP690 Adhesive | 3.2 SCK

	Manufacturer	Inks	Min. Temp.	Max. Temp.	Indoor	Outdoor	Additional Conditions
UL Recognition	Environmental Inks & Coatings	Film III NW (No Wax)	-40 °F	140 °F	All Colors	All Colors	C, F1, G, K, O
			-40 °F	176 °F	BK, BL, RD	BK, BL, RD	C, F1, G, K, O
cUL Recognition	Environmental Inks & Coatings	Film III NW (No Wax)	-	140 °F	All Colors	All Colors	C, G, K, O
			-	176 °F	BK, BL, RD	BK, BL, RD	C, G, K, O

Digital/UV

VDG6911
3.4 Mil Matte Top-coated,
White Flexible PVC
MP690 Adhesive | 3.2 SCK

	Manufacturer	Inks	Min. Temp.	Max. Temp.	Indoor	Outdoor	Additional Conditions
UL Recognition	EFI Jetrion	UV Inkjet	-40 °F	176 °F	BK, BL, RD	BK, BL, RD	C, F1, G, K, O
	INX Digital International	NWUV UV Inkjet					
cUL Recognition	EFI Jetrion	UV Inkjet	-	176 °F	BK, BL, RD	BK, BL, RD	C, G, K, O
	INX Digital Intermediate	NWUV UV Inkjet					

BK Black, **BL** Blue, **RD** Red, **YL** Yellow

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

<p>FAD6914 2.0 Mil Gloss Top-coated, Clear PET MP690 Adhesive 3.2SCK</p>					<p>FED6914 2.0 Gloss Top-coated Bright Silver Metalized PET MP690 Adhesive</p>				
					<p>FFD6914N 2.0 Mil Matte Top-coated, Silver Metalized PET MP690 Adhesive</p>				
					<p>FGD6914N 2.0 Mil Gloss Top-coated Brushed Silver Metalized PET MP690 Adhesive</p>				
					<p>FCD6914 2.0 Mil Gloss Top-coated WHITE PET MP690 Adhesive</p>				
					<p>FJD6914 * 2.0 Mil Top-coated Reverse Void PET MP690 Adhesive</p>				
Min. Temp.	Max. Temp.	Indoor	Outdoor	Additional Conditions	Min. Temp.	Max. Temp.	Indoor	Outdoor	Additional Conditions
-40 °F	257 °F	All Colors	All Colors	C, F1, G, K, O	-40 °F	302 °F	All Colors	All Colors	C, FI, G, K, O
-40 °F	302 °F	BK, BL, RD	All Colors	C, F1, G, K, O	-	302 °F	All Colors	All Colors	C, G, K, O
-	257 °F	All Colors	All Colors	C, G, K, O	-	302 °F	All Colors	All Colors	C, G, K, O
-	302 °F	BK, BL, RD	BK, BL, RD	C, G, K, O	-	302 °F	All Colors	All Colors	C, G, K, O
<p>BDE6914 2.6 Mil Matte Top-coated, White BOPP MP690 Adhesive</p>					<p>FFD6914N 2.0 Mil Matte Top-coated, Silver Metalized PET MP690 Adhesive</p>				
<p>FED6914 2.0 Gloss Top-coated Bright Silver Metalized PET MP690 Adhesive</p>					<p>FCD6914 2.0 Mil Gloss Top-coated WHITE PET MP690 Adhesive</p>				
Min. Temp.	Max. Temp.	Indoor	Outdoor	Additional Conditions	Min. Temp.	Max. Temp.	Indoor	Outdoor	Additional Conditions
-40 °F	212 °F	All Colors	All Colors	C, F1, K, O	-40 °F	302 °F	BK, BL, RD	BK, BL, RD	C, FI, G, K, O
-40 °F	302 °F	BK, BL, RD	BK, BL, RD	C, FI, G, K, O	-40 °F	302 °F	BK, BL, RD	BK, BL, RD	C, FI, G, K, O
-40 °F	302 °F	BK, BL, RD	BK, BL, RD	C, FI, G, K, O	-40 °F	302 °F	All Colors	All Colors	C, FI, G, K, O
-	212 °F	All Colors	All Colors	C, F1, G, K, O	-	302 °F	BK, BL, RD	BK, BL, RD	C, G, K, O
-	302 °F	BK, BL, RD	BK, BL, RD	C, G, K, O	-	302 °F	BK, BL, RD	BK, BL, RD	C, G, K, O

* US Only

DURABLE FILMS

Thermal Transfer Ribbon Approved - PGJI2/PGJI8

		BDE6914 2.6 Mil Matte Top-coated White BOPP	BDF6914 3.0 Mil Matte Top-coated White BOPP	VDG6911 3.4 Mil Matte Top- coated White Flexible PVC	FAB6914 1.0 Mil Top-coated Clear PET
Manufacturer		UL Recognized Ribbons	UL Recognized Ribbons	UL Recognized Ribbons	UL Recognized Ribbons
UL Recognized	Datamax	SDR-D, PGR Wax Resin, IQMID+ Wax Resin	SDR-D, PGR Wax Resin, IQMID+ Wax Resin	SDR-D	SDR-5, IQRES+
	DNP (Sony)	R300, TRX-55 Wax Resin, TR6075	R300, TRX-55 Wax Resin, TR6075	R300 , TR6075	R510, TR6070
	EFI "Jetrion Series"	UV Inkjet All Colors	-	UV Ink Jet All Colors	UV Ink Jet All Colors
	Fuji Copian	FTX 308	-	-	-
	ITW	M95/B128 Wax-Resin	M95/B128 Wax-Resin	B324	B324
	INX Digital International	NWUV UV Inkjet Series All Colors	-	-	-
	Iimak	SP330	-	SP330	-
	Zebra	-	-	-	-
cUL Recognized	Datamax	SDR-D, PGR Wax Resin, IQMID+ Wax Resin	SDR-D, PGR Wax Resin, IQMID+ Wax Resin	SDR-D	SDR-5, IQRES+
	DNP	R300, TRX-55 Wax Resin, TR6075	R300, TRX-55 Wax Resin, TR6075	R300 , TR6075	R510, TR6070
	EFI "Jetrion Series"	UV Inkjet All Colors	-	UV Inkjet All Colors	UV Inkjet All Colors
	Fuji Copian	FTX 308	-	-	-
	ITW	M95/B128 Wax-Resin	M95/B128 Wax-Resin	B324	B324
	INX Digital International	-	-	-	-
	Iimak	-	-	-	-
	Zebra	-	-	-	-
	Limitations:	None	DNP "TRX-55", DNP "R300" are not suitable for Gasoline exposure	Not suitable for Kerosene exposure	None

FAD6914 2.0 Mil Gloss Top-coated Clear PET	FCD6914 2.0 Mil Gloss Top-coated White PET	FED6914 2.0 Mil Gloss Top-coated Bright Silver Met- alized PET	FGD6914N 2.0 Mil Gloss Top-coated Brushed Silver Metalized PET	FFD6914N 2.0 Mil Gloss Top-coated Matte Silver Metalized PET	FJD6914 2.0 Mil Top-coated Reverse Void PET
UL Recognized Rib- bons	UL Recognized Rib- bons	UL Recognized Rib- bons	UL Recognized Rib- bons	UL Recognized Rib- bons	UL Recognized Rib- bons
SDR-5, IQRES+ Resin	SDR-D, SDR-5, IQRES+ Resin	SDR, SDR-D, SDR-5, IQRES+ Resin	SDR-5, IQRES+ Resin	SDR, SDR-D, SDR-5, IQRES+ Resin	SDR, SDR-D, SDR-5, IQRES+ Resin
R510, TR6070	TR6075, R300, R510, TR6070	TR4070,TR6075, Signature Series, R300, R510, TR6070	R510, TR6070	TR4070, TR6075, Signature Series, R300, R510, TR6070	TR4070, TR6075, Signature Series, R300, R510, TR6070
UV Inkjet All Colors	UV Inkjet All Colors	UV Inkjet Black, Blue, Red	-	UV Inkjet Black, Blue, Red	UV Inkjet Black, Blue, Red
-	FTX 308	-	-	-	-
-	B324	B324	-	B324	B324
-	NWUV UV Inkjet Series All Colors	NWUV UV Inkjet Series All Colors	-	NWUV UV Inkjet Series All Colors	NWUV UV Inkjet Series All Colors
-	SP330	SP330	-	SP330	SP330
-	5100, 5095	5100, 5095	-	5100, 5095	5100, 5095
SDR-5 R, IQRES+ Resin	SDR-D, SDR-5, IQRES+ Resin	-	SDR-5, IQRES+ Resin	-	-
R510, TR6070	TR6075, R300, R510, TR6070	-	R510, TR6070	-	-
UV Inkjet All Colors	UV Inkjet All Colors	-	-	UV Inkjet Black, Blue, Red	-
-	FTX 308	-	-	-	-
-	B324	-	-	-	-
-	-	-	-	NWUV UV Inkjet Series All Colors	-
-	SP330	-	-	SP330	-
-	5100, 5095	-	-	-	-
None	None	Iimak "SP330" is not suitable for Gasoline exposure	None	-	-

For additional information or to submit a label adoption request with Mactac® go to the UL website, www.UL.com. Mactac's file numbers are provided below.

Listings	Category	Mactac File Number
Marking and Labeling System Materials - US	PGGU2	MH12627
Marking and Labeling System Materials - Canada	PGGU8	MH12627
Printing Materials - US	PGJI2	MH26726
Printing Materials - Canada	PGJI8	MH26726
Materials for use in Transportation Applications	OMRV2	E490667

Material for use in Transportation Applications:

Durable Film VDG6911 was tested by UL and passed Federal Motor Vehicle Safety Standards (FMVSS) No. 302 flammability certification requirements on both aluminum and glass surfaces.

What does this mean? FMVSS 302 is a flammability test designed for the automotive industry that measures a material's fire retardancy and burn resistance. It is frequently required for materials used inside a vehicle's passenger compartment and is intended to reduce death and injury to motor vehicle occupants caused by vehicle fires.

As with all Mactac® Durable Films, VDG6911 was developed with Mactac's MP690 high-performance, high-tack permanent acrylic emulsion adhesive, which is extremely resistant to chemicals and solvents and has very good adhesion to high- and low-energy substrates.

