



▶ DPF 390

DPF 390 is a white seamless 19.5-oz. wide-width flexible substrate designed for large sign faces where durability and uniform light transmission are important. DPF 390 is recommended for digital and UV screen printing, PSA translucent vinyl, and other film decoration methods. It is compatible with cast translucent vinyl and features a durability of up to 7-year outdoor when laminated. DPF 390 passes the NFPA 701 fire resistant certification test.

APPLICATIONS & FEATURES

- Digitally printable with Eco-Solvent, Solvent, UV, and Latex direct print systems
- Can be decorated with pressure-sensitive vinyl films and heat transfer decoration methods
- Indoor and outdoor backlit illuminated signage
- Intermediate flexible substrate applications including; indoor and outdoor backlit illuminated signage, LED and Fluorescent large and small light boxes, and awnings
- Optically clear and other cast overlaminates are recommended for DPF 390

PERFORMANCE & PHYSICAL DATA

PROPERTY	TEST METHODS	TYPICAL VALUE	
THICKNESS	Section 8, Vol. 08.01, D1593-89	22-mil (0.56 mm)	
WEIGHT	Section 8, Vol. 08.01, D1593-89	19.5 oz/sq yd	650 g/sq m
YARN (DENIER)	Internal Test Method	500x500	
THREAD COUNT (WARP, WEFT)	Internal Test Method	18/sq in	7/sq cm
TENSILE STRENGTH (WARP, WEFT)	Section 8, Vol. 08.01, D1593-89	180 lbf/linear in	800 Newton Force
		150 lbf/linear in	670 Newton Force
ELONGATION	Section 8, Vol. 08.01, D1593-89	33%	
TEAR RESISTANCE (WARP, WEFT)	Section 8, Vol. 08.01, D1593-89	23 lbf	102 Newton Force
		20 lbf	89 Newton Force
OPACITY	Internal Test Method	>75%	
GLOSS	Section 8, Vol. 08.01, D1593-89	10 - 20 Gloss Units	
LIGHT TRANSMISSION	Internal Test Method	19 to 21%	
SHELF LIFE (IN BOX)	Ideal storage temperature 70°F (21°C) and 50% relative humidity	1 year from factory shipment. (Free from excessive moisture, temperature, and direct sunlight)	
PRINTABILITY	Internal Test Method	EcoSolvent, Solvent, UV, and Latex digital inks	
FIRE RESISTANCE	Flammability NFPA 701-2004 Test I		

Product performance will vary in each application and is dependent upon composite construction. Arlon Graphics does not guarantee the replication of this data by third parties. None of the data or statements contained herein is intended to warrant the performance of this product. Data is representative and not intended as a manufacturing specification.

USA

- 200 Boysenberry Lane
Placentia, CA 92870
- 800 232 7161 / +1 714 985 6300
- +1 714 985 6305

- 6110 Rittiman Road
San Antonio, TX 78218
- 800 549 9860 / +1 210 798 1900
- +1 210 798 1939

EUROPE

- Koninginnegracht 10 2514 AA
Den Haag, The Netherlands
- +31 70 354 4311
- +31 70 355 7721

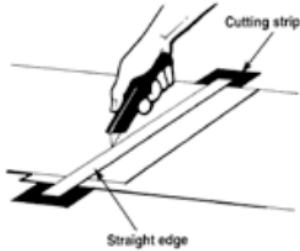
AUSTRALIA

- 18 Axis Crescent
Dandenong South, VIC 3175
- +61 3 8751 7999

CHINA

- No. 1989 Xinchang Road
Weifang, Shandong, 262400
- +86 0536 6226568

TRANSLUCENT FILM OVERLAP RECOMMENDATION ON DPF 390



Joined sections of film should overlap preferably 1/4" but at least 1/8".

A COMMON METHOD

1. To create a uniform overlap, first tape a cutting strip onto the substrate. A two-inch (5 cm) piece of thin steel at 1/16" (1.6mm) thickness is a good dimension for cutting strip
2. Lay both pieces of vinyl over the cutting strip
3. Place a metal straight edge where the two pieces of film cover the cutting strip. With a sharp utility knife, cut through all layers of film
4. Remove the straight edge, excess film, and the cutting strip
5. Complete the squeegeeing procedure to create a proper overlap with uniform and straight edges

SUBSTRATE TEMPERATURE

The best temperature for tensioning DPF 390 is between 50°F to 100°F (10°C to 35°C). Once tensioned it will maintain its form without sagging between the temperatures -41°F to 176°F (42°C to 80°C).

SMOOTH SURFACE

The manufacturing process in the production of DPF 390 provides for a flat, smooth surface. This flat, smooth surface allows for minimized dirt settlement and easier graphic application.

DECORATION

DPF 390 is a bright white flexible, reinforced, vinyl substrate. It is created for the sign and awning industries for use in backlit graphic applications utilizing PSA vinyl and print decoration methods.

HANDLING, PACKAGING, & SHIPPING

When handling DPF 390 do not fold tightly or bunch as creasing or wrinkling may occur. If a crease occurs, apply heat with a 1000-watt heat gun to remove crease. When packaging, roll up on an inner core measuring a minimum of 6 inches (76 cm) in diameter with graphics facing out. When shipping, use an appropriate, sure fitting shipping core.

STORAGE

DPF 390 should be stored in a cool, dry environment. Preferred temperature is 60°F to 75°F (16°C to 24°C) with maximum humidity level of 50%.

SHELF LIFE

1 year




PRE-CLEANING




If the surface has to be cleaned, use a lint-free cloth moistened with a mixture of 1-part isopropyl alcohol to 1-part water. After cleaning, use a dry lint-free cloth to remove any wet areas.

CLEANING




Refer to Arlon's [Tip #43 Cleaning Guide for DPF 390](#) for more information.

USA



-  200 Boysenberry Lane
Placentia, CA 92870
-  800 232 7161 / +1 714 985 6300
-  +1 714 985 6305

-  6110 Rittiman Road
San Antonio, TX 78218
-  800 549 9860 / +1 210 798 1900
-  +1 210 798 1939

EUROPE

-  Koninginnegracht 10 2514 AA
Den Haag, The Netherlands
-  +31 70 354 4311
-  +31 70 355 7721

AUSTRALIA

-  18 Axis Crescent
Dandenong South, VIC 3175
-  +61 3 8751 7999

CHINA

-  No. 1989 Xinchang Road
Weifang, Shandong, 262400
-  +86 0536 6226568

WARRANTIES

Hasta 7 años de durabilidad en exteriores cuando está laminado

CODES, APPROVALS, & CERTIFICATIONS




DPF 390 has passed the following Codes, Approvals, and Certifications: California State Fire Marshal, NFPA 701, Underwriters Laboratories, and ASTM E84.




TERMS & CONDITIONS

The warranties offered in Arlon's Standard Terms and Conditions, which are incorporated in full by this reference and are available at https://www.arlon.com/na_en/legal/terms-and-conditions, are made in lieu of all other express or implied warranties.

April 2026

USA



-  200 Boysenberry Lane
Placentia, CA 92870
-  800 232 7161 / +1 714 985 6300
-  +1 714 985 6305

-  6110 Rittiman Road
San Antonio, TX 78218
-  800 549 9860 / +1 210 798 1900
-  +1 210 798 1939


EUROPE

-  Koninginnegracht 10 2514 AA
Den Haag, The Netherlands
-  +31 70 354 4311
-  +31 70 355 7721

AUSTRALIA

-  18 Axis Crescent
Dandenong South, VIC 3175
-  +61 3 8751 7999

CHINA

-  No. 1989 Xinchang Road
Weifang, Shandong, 262400
-  +86 0536 6226568