# **PROFESSIONAL PLASTICS, INC.**

Leading Global Supplier of Engineered Plastic Shapes

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### **Pro F-Line - Fluoropolymeric Films and Thin Tubes**

Pro F-Line is the range of films, thin tubes and tapes produced from high-performance thermoplastic fluoropolymers such as ETFE, FEP, THV and PVDF. These products are produced with remarkable quality from the most advanced machinery. Pro F-Line films can be produced up to 2000 mm wide with a very sophisticated thickness control in the range from 12 to 300 micron. All these products feature outstanding chemical stability, wide range of service temperature, resistance to UV radiation, weather resistance, flame resistance and can be recycled.

### **Pro-FEP**

High performance films and tubes. The special fluoropolymer provides outstanding resistance to chemical agents, a working temperature range which exceeds 200°C and excellent electrical properties, mechanical strength and durability.

#### Key Features:

- Service temperatures over 200℃
- Excellent resistance to solvents and chemicals
- Outstanding electrical properties
- Flame resistance
- Extremely smooth surface

#### **Typical Applications:**

Telecommunications, wire & cable, semiconductors, paper industry, chemicals, textiles, food processing, packaging, composites, protective coating.

#### Standard Shapes:

Sheets, Thin Wall Tubes and Tapes Sheet width: up to 2000 mm Sheet Thickness: from 0.013 to 0.300 mm and more Flat tube width: up to 1000 mm Flat Tube Width: from 0.013 to 0.150 mm Colors: Transparent and Red Available also micro perforated



# **Pro-THV**

Provides a combination of performance advantages, such as low processing temperature, ability to bond to elastomers and hydrocarbon-based plastics, flexibility and optical clarity.

#### Key Features:

- Excellent optical clarity and light transmission;
- · Bondability with many elastomers and plastics;
- Outstanding flexibility in comparison with other fluoroplastics;
- Excellent permeation resistance;
- Good resistance to chemicals;
- · Low temperature processability.

#### **Typical Applications:**

Automotive, chemical processing, multi-layer tubes and hoses, semiconductors, solar energy, optical fiber and architectural and protective coatings.

#### Standard Shapes:

Sheets, Thin Wall Tubes and Tapes Sheet Width: up to 450 mm Flat Tube Width: up to 450 mm Thickness: up to 0.200 mm Colors: Transparent Available also Food Grade (White) and Conductive (Black)



# **Pro-ETFE**

Together with an outstanding resistance to chemicals can be used continuously up to approximately 175°C service temperature.

#### Key Features:

- Wide service temperature range
- Low flammability
- Excellent mechanical and electrical properties
- Very good resistance to chemicals and solvents
- Extremely high resistance to outdoor weathering
- High light transmission in the visible and UV ranges
- Non-stick characteristics
- Excellent tearing resistance
- Very low permeability

#### **Typical Applications:**

Aerospace, automotive, chemical processing, composites, greenhouse coverings, architectural membranes.

#### Standard Shapes:

Sheets, Thin Wall Tubes and Tapes Sheet width: up to 2000 mm Sheet thickness: from 0.013 to 0.300 mm and more Flat tube width: up to 1200 mm Flat tube thickness: from 0.013 to 0.150 mm Colors: Transparent and Blue Available also micro perforated



### **Pro-PVDF**

Excellent mechanical strength and abrasion resistance, durability and good chemical resistance allow for a wide range of applications, with continuous operating temperatures up to 150°C.

#### Key Features:

- Excellent mechanical strength
- Good resistance to chemicals
- Continuous operating temperatures up to 150℃
- Smooth and self cleaning surface
- Unrivalled lifespan without decay
- Resistance to UV and nuclear radiation
- Excellent flame resistance
- Good impermeability

#### **Typical Applications:**

Chemical processing, tubes and hoses, semiconductors, wire and cable, automotive, nuclear, protective coatings, food and pharmaceutical processing.

#### Standard Shapes:

Sheets, Thin Wall Tubes and Tapes Sheet Width: up to 450 mm Flat Tube Width: up to 450 mm Thickness: up to 0.200 mm







### FEP and ETFE Release Films

Unrivaled non-stick surface, exceptional adaptation even to complex surfaces, wide range of service temperature, easy and clean removing from products and molds. ETFE and FEP release films (or separating foils) are typically used for compression and resin transfer molding composites.

#### **ETFE Release Films**

- Color: Translucent Blue
- Width: up to 190 cm (74")
- Thickness: from 20 micron (0.0008")

#### Our standard rolls:

Thickness	Width	Length
20 micron (0.0008")	122 cm (48") 152 cm (60")	153 m (500 ft)
25 micron (0.001")	122 cm (48") 152 cm (60")	153 m (500 ft)

### **FEP Release Films**

- Color: Translucent Red
- Width: up to 190 cm (74")
- Thickness: from 13 micron (0,0005")

### Standard Rolls:

Thickness	Width	Length
13 micron (0.0005")	122 cm (48") 152 cm (60")	305 m (1000 ft)
20 micron (0.0008")	122 cm (48") 152 cm (60")	153 m (500 ft)
25 micron (0.001")	122 cm (48") 152 cm (60")	153 m (500 ft)







Professional Plastics, inc. relies on Dyneon<sup>™</sup> Fluoropolymers to grant the quality of its films and membranes. Dyneon<sup>™</sup> Fluoropolymers are made without using APFO (ammonium perfluorooctanoate), as a clear commitment to responsible environmental stewardship, meeting the U.S. Environmental Protection Agency's Voluntary PFOA Stewardship Program goals seven years ahead of time.



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