



# HIGH PERFORMANCE FILMS



ARCHITECTURAL



EXTRUDED AND SKIVED FILMS IN  
PTFE  
FEP - PFA  
MFA - ETFE  
THV - PVDF



AEROSPACE

## TEKLEASE

RELEASE FILMS



RECREATIONAL



ENERGY



AUTOMOTIVE

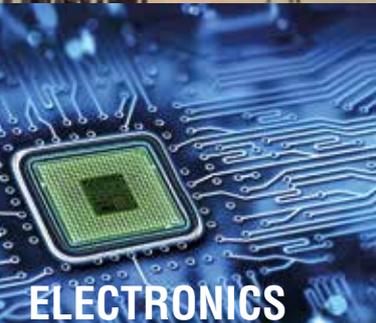
## TEKFILM

PTFE AND THERMOPROCESSABLE FLUOROPOLYMERS SKIVED FILMS  
EXTRUDED FEP-ETFE-THV-PVDF-PFA FILMS



## TEKBOND

PREMIUM QUALITY PRESSURE SENSITIVE ADHESIVE TAPES



ELECTRONICS



FLAME RETARDANTS

HIGH TEMPERATURE RELEASE FILMS | CLEAN RELEASE | SEALANT TAPES

# HIGH TEMPERATURE RELEASE FILMS CLEAN RELEASE SEALANT TAPES

Guarniflon® S.p.A. HPF is the range of films and tapes produced from the main thermoplastic fluoropolymers available, such as ETFE, FEP, THV, PVDF and PFA, with remarkable quality thanks to new dedicated machinery able to produce 2000 mm wide films equipped with sophisticated thickness control in the range from 12 to 300 micron and more.

All the products of the range offer an outstanding chemical stability, a wide range of service temperature, resistance to uv radiation and more generally to any weather condition, flame retardancy and possibility of recycling.



## FEP

Hi-tech films. The special fluoropolymer gives to the products outstanding resistance to chemical agents, a working temperature range which exceeds 200°C and excellent electrical properties, mechanical strength and durability.

### Main advantages:

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

### Main areas of application:

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

### Supply forms:

Film Sheets, thin tapes  
Sheet width: up to 2000 mm  
Sheet thickness: from 0,013 to 0,250 mm  
Colors: transparent and red  
Available also micro perforated

## 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.

### Main advantages:

- 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

### Main areas of application:

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

### Supply forms:

Film Sheets, thin tapes  
Sheet width: up to 2000 mm  
Thickness: up to 0,200 mm  
Colors: transparent  
Available also food grade (white) and conductive (black)

## ETFE

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

### Main advantages:

- 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

### Main areas of application:

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

### Supply forms:

Film Sheets, thin tapes  
Sheet width: up to 2000 mm  
Sheet thickness: from 0,020 to 0,250 mm  
Colors: transparent and blue  
Available also micro perforated

## PVDF

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

### Main advantages:

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

### Main areas of application:

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

### Supply forms:

Film Sheets, thin tapes  
Sheet width: up to 450 mm  
Thickness: up to 0,100 mm  
Colors: transparent



## PFA

Extruded films featuring exceptional heat resistance, excellent electrical properties and excellent chemical and weather resistance.

### Main advantages:

- Service temperature up to 260°C
- Good low friction properties
- High degree of transparency
- Excellent weatherability
- Excellent electrical properties
- Excellent universal resistance to solvents and chemicals
- Does not support combustion

### Main areas of application:

Chemical processing, wire & cable, coating applications, electronics, superior release in composites

### Supply forms:

Sheets and tapes  
Sheet width: 1220mm  
Sheet thickness: 0.050mm and 0.127mm  
Color: natural transparent

# HIGH PERFORMANCE FILMS APPLICATIONS

COMPOSITE RELEASE  
AEROSPACE  
AUTOMOTIVE  
RECREATIONAL  
ENERGY

GENERAL INDUSTRY

Guarniflon® was established in 1982, enthusiasm, dedication and perseverance being the key factors which have allowed us to evolve to our present status of worldwide leader in our business field.

Guarniflon® has been evolving during recent years through local integration of its international Group of companies. Guarniflon® nowadays means:

- the Italian HQ's located in Northern Italy, one of the most industrialized area in Europe, focused on R&D, Quality and Customer Care, raw materials compounding and high tech product processing;
- European network with subsidiaries in Germany, France, UK, Spain and Romania. Each single company run by local managers, with their own warehouses, semifinished stock and sales network, responding to the needs of local customers;
- Overseas Companies in India and USA, both manufacturers;
- Technical and R&D support to Customers, coming from almost 35 years' experience in processing PTFE and others fluorobased products.



Each Company Division is equipped with a Quality laboratory with the most up-to-date equipment able to perform the necessary test to ensure a stable and high level quality standard. In other words being with Guarniflon® means nowadays to cooperate with a reliable technical partner in the fluorobased product field, taking advantage of strong experience, technical benefits and flexibility.



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