

CHEMFILM® Flex Barrier Solutions are manufactured from high quality, virgin PTFE resins which are molded into billets, sintered and skived to the required thickness with extremely tight tolerance control.

Using a specialized modification process, single and multi-layer films are manufactured with significantly improved flexibility (FR) and low permeability (LP properties).

State of the art quality systems of the manufacturing site including compliance to ISO 9001 and IATF 16949 certifications provide consistent and extremely reliable film quality.

### Features

- Width: Standard 650 mm
- Thickness: 0.4 up to 1 mm (16 mil up to 0.04")
- Temperature: -200 °C to +260 °C
- Color: White
- Tensile strength:  $\geq 25$  N/mm<sup>2</sup>
- Elongation:  $\geq 200$  %
- Roll lengths dependent on film thickness  
e.g. 0.1 mm: ~80 lm

### Benefits

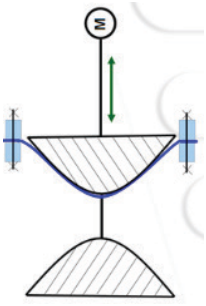
- Higher flex life
- Low permeability version available
- Customized structure (multi-layer)
- Bondable versions available
- Extremely stable at wide range of temperatures
- Non-stick, easy release film
- Low coefficient of friction
- High insulation and dielectric properties
- Outstanding chemical resistance - inert and unaffected by most chemicals except alkali metals
- Extremely tight tolerances

### Regulations / Conformities

- FDA 21 CFR 177.1550
- (EC) No 1935/2004
- (EU) No 10/2011
- (EC) No 23/2006 (GMP)
- USP Class VI
- 3-A Sanitary Standard
- (EC) No 1907/2006 (REACH)
- 2011/65/EU (RoHS)

### Applications

- Diaphragms
- Low-friction (anti-squeak) especially in automotive applications
- Gas and liquid tight barrier in compensators, expansion joints and bellows



**FR version:**

Lifetime increase up to 70 %\* compared to regular Premium PTFE films

\* In high frequency flex life test (developed by Saint-Gobain) as shown in the figure

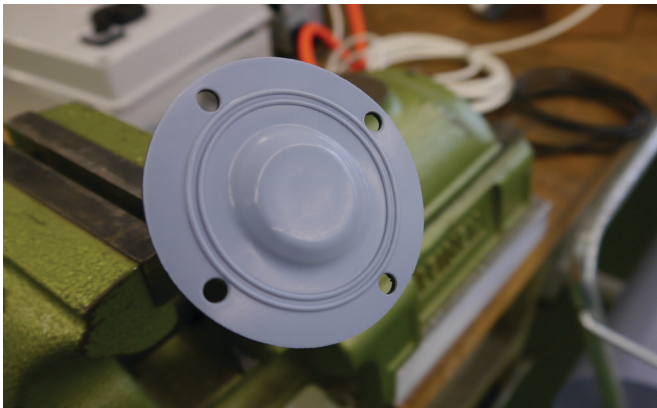
**LP version:**

Higher chemical barrier up to 30 %\*\* compared to regular FR version

\*\* Watervapor transmission rate at 38 °C 100 % RH

**Did you know?**

One of our CHEMFILM Flex Barrier laminates is being used as a “deep drawn” formed diaphragm for rocket fuel tanks going into space!



Saint-Gobain Performance Plastics

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