



## PRODUCT CAPABILITIES:

- Rod : 1/4" - 1.75"
- Sheet : 1/4" - 2"

## ADVANTAGES:

- **FEP** Has High Transparency
- FEP Has Long Term Weatherability And Excellent Resistance To Ozone, Sunlight And Weather
- **PFA** Offers Similar Properties To FEP, But Is Considered More Of A Premium Resin
- PFA Is Preferred When Extended Service Is Required In Hostile Environments Involving Chemical, Thermal And Mechanical Stress

## PRODUCT COLORS:

- Translucent (Natural)

## APPLICATIONS INCLUDE:

- Linings For Pipe, Chemical Processing Roll Covers, Numerous Wire And Cable Application Like Aircraft Wire, Plenum Cable, Fire Alarm Cable And Well Logging Cable.
- Heat-Shrinkable FEP Tubing Is Available.
- FEP Film Is Used As Glazing In Solar Energy Collectors.

| GENERAL PROPERTIES  | ASTM or UL Test | FEP Typical Values | PFA Typical Values |
|---|-----------------|--------------------|--------------------|
| <b>PHYSICAL</b>   |                 |                    |                    |
| Specific Gravity (g/cm <sup>3</sup> )                       | D792            | 2.15               | 2.15               |
| Water Absorption, 24 hrs (%)                                | D570            | 0.004              | <0.03              |
| <b>MECHANICAL</b>   |                 |                    |                    |
| Tensile Strength (psi)                                      | D1708           | 4,000              | 4,000              |
| Tensile Elongation at Break (%)                             | D1708           | 340                | 300                |
| Flexural Modulus (psi)                                      | D790            | 90,000             | 85,000             |
| Compressive Strength (psi)                                  | D695            | 2,200              | 3,500              |
| Compressive Modulus (psi)                                   | D695            | –                  | –                  |
| Hardness, Shore D   | D2240           | D56                | D55                |
| IZOD Notched Impact (J/m)                                   | D256            | No Break           | No Break           |
| Coefficient of Friction                                     | D1894           | 0.25               | 0.21               |
| Deformation Under Load 23°C, 1 Kpsi, 24hr (%)               | D621            | 2                  | 2                  |
| <b>THERMAL</b>  |                 |                    |                    |
| Coeff. of Thermal Expansion (x 10 <sup>-5</sup> in./in./°F) | D696            | –                  | –                  |
| Heat Deflection Temp (°F / °C) @ 66 psi                     | D648            | 338 / 170          | –                  |
| Melting Temp (°F / °C)                                      | D3418           | 567 / 264          | 581 / 305          |
| Max Operating Temp (°F / °C)                                | –               | 399 / 204          | 500 / 260          |
| Thermal Conductivity (W/m°C)                                | –               | 0.2                | 0.19               |
| Flammability Rating   | UL94            | V-O                | V-O                |
| <b>ELECTRICAL</b>   |                 |                    |                    |
| Dielectric Strength (V/mil)                                 | D149            | 2,000              | 2,000              |
| Dielectric Constant at 1 MHz                                | D1531           | 2.06               | 2.03               |
| Dissipation Factor at 1 MHz                                 | D1531           | 0.0003             | 0.0001             |
| Arc Resistance (sec)  | D495            | 165                | >180               |
| Volume Resistivity (ohm-cm) at 50% RH                       | D257            | 10 <sup>17</sup>   | 10 <sup>18</sup>   |

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.