

Modified Polyetheretherketone Film Data Sheet

Modified PEEK (poly-etheretherketone) films can offer improved ductility and impact strength relative to PEEK.

This material has been specifically formulated for applications requiring a balance of chemical resistance and mechanical strength along with good part aesthetics, bridging the performance gaps within the ultra polymers space.

Modified PEEK films have high temperature resistance, very good chemical and fatigue resistance and high thermal stability.

Plus, modified PEEK films generally offer improved part economics relative to unmodified PEEK films.

All these properties make it well -suited for applications in healthcare, transportation, electronics, chemical processing, and other industrial uses.

MANUFACTURING

Modified PEEK films are extruded by Ajedium Films in a wide range of thicknesses, widths and lengths.

For further information on modified PEEK films produced by Ajedium Films, a division of Solvay Solexis, Inc., contact your Solvay Solexis representative, call Ajedium Films at (302) 452-6609 or go to www.ajedium.com.

MODIFIED PEEK FILM - TYPICAL PROPERTIES*

| Properties | Test Method | Typical Values | |
|--|-------------|---------------------------|--------------------------------|
| | | SI Units | US Customary Units |
| Physical and Thermal Properties | | | |
| Melting Temperature | ASTM D-3418 | 340 °C | 644 °F |
| Glass Transition Temperature | ASTM D-3418 | 158 °C | 316 °F |
| Water Absorption @ 50°C (122°F), 75%RH, 24 hrs. | ASTM D-570 | 0.2 % | 0.2 % |
| Yield | internal | 775 m ² /kg/μm | 21,450 in ² /lb/mil |
| Mechanical Properties | | MD TD | MD TD |
| Stress at Yield @ 23°C (73°F) | ASTM D-882 | 72 MPa 69 MPa | 10,400 psi 10,000 psi |
| Elongation at Yield @ 23°C (73°F) | ASTM D-882 | 7.8 % 7.3 % | 7.8 % 7.3 % |
| Stress at Break @ 23°C (73°F) | ASTM D-882 | 87 MPa 83 MPa | 12,600 psi 12,100 psi |
| Elongation at Break @ 23°C (73°F) | ASTM D-882 | 166 % 164 % | 166 % 164 % |
| Modulus @ 23°C (73°F) | ASTM D-882 | 2,040 MPa 2,000 MPa | 296 kpsi 290 kpsi |
| Tear Propagation | ASTM D-1922 | 54 g force 33 g force | 0.12 lbf 0.073 lbf |
| Tear Resistance | ASTM D-1004 | 2030 g force 1970 g force | 4.47 lbf 4.35 lbf |
| Dart Impact | ASTM D-1709 | 828 g | 1.83 lb |

* Reported values were measured on a 50μm thick film

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