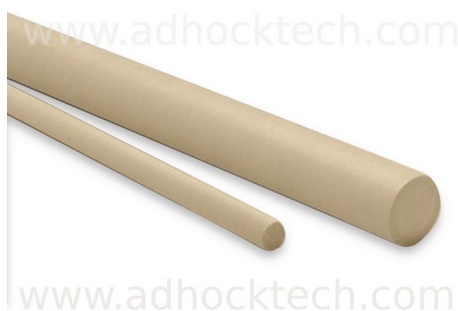


# Polyetheretherketone (PEEK)

It's a semi-crystalline thermoplastic technologically innovative, it combines different and extraordinary mechanical properties (chemical resistance, heat resistance, resistance to steam, resistance to extreme cold).  
Raw material Polyetheretherketone (PEEK).



## MECHANICAL PROPERTIES

| Temperature of use | Density | Yield Stress | Breakdown Voltage | Modulus of elasticity (tension) | Modulus of elasticity (tension) | Modulus of elasticity (bending) | Hardness Test | Breaking Strength | Resistance Elongation | Wear Creep |
|--------------------|---------|--------------|-------------------|---------------------------------|---------------------------------|---------------------------------|---------------|-------------------|-----------------------|------------|
| C°                 | g/cm³   | Mpa          | Mpa               | %                               | MPa                             | MPa                             | MPa           | MPa               | μ/km                  |            |
| 260                | 1,30    | 95           |                   | 25                              | 3000                            | 4100                            | M99 (r)       |                   |                       |            |

## THERMAL PROPERTIES

| Melting Temperature | Glass Transition Temperature | Hot Dimensional Stability (met. A) | Hot Dimensional Stability (met. B) | Use Temperature Limit | Thermal Conductivity | Heat Capacity | Coefficient of Thermal Expansion |
|---------------------|------------------------------|------------------------------------|------------------------------------|-----------------------|----------------------|---------------|----------------------------------|
| C°                  | C°                           | C°                                 | C°                                 | C°                    | W/K.m                | J/K.m         | 10 1/K                           |
|                     |                              |                                    |                                    | 100                   |                      |               |                                  |

## ELECTRICAL PROPERTIES

| Constant Dielectric | Dielectric Loss Factor | Specific Bulk Resistivity | Surface Resistivity | Rigidity Dielectric | Resistance to Leakage Current |
|---------------------|------------------------|---------------------------|---------------------|---------------------|-------------------------------|
| abs                 | Tan δ                  | Ω.cm                      | Ω                   | kV/mm               | class                         |
|                     |                        | 10 <sup>12</sup>          |                     |                     |                               |

## VARIOUS PROPERTIES

| Moisture Absorption | Water Absorption until Saturation | Specific Bulk Resistivity |
|---------------------|-----------------------------------|---------------------------|
| %                   | %                                 |                           |
|                     |                                   |                           |