

# PEEK-FDM

## Details

PEEK is hard, stiff and has high strength. It maintains its chemical resistance at elevated temperatures. In addition, it has excellent resistance to fatigue, stress – crack, high-pressure water and steam. It is used in the production of components such as tubes, bearings, seals, valves, electric insulation and even medical implants.

## Key Features

Hard • Stiff • Resistant to chemicals and fatigue

## Thermal Properties

Property	Value
Heat deflection [°C]	152
Glass transition temperature [°C]	143
Vicat softening temperature [°C]	250
Coefficient of thermal expansion [K <sup>-1</sup> · 10 <sup>-6</sup> ]	50
Thermal conductivity [W/m·K]	0.25
Specific heat capacity [J/kg·K]	1340
Melting point [°C]	343

## Mechanical Properties

Property	Value
Tensile strength [MPa]	110
Modulus of elasticity [GPa]	4
Flexural strength [MPa]	170

## Physical Properties

Property	Value
Density [g/cm <sup>3</sup> ]	1.31
Water Absorption [%]	0.1
Electrical Resistivity [ohm-cm]	3.3e+021