



Industrial PEEK

Alternative Designations

Polyetheretherketone

Key Features

Hard • High mechanical strength • Resistant to chemicals and fatigue

Description

Industrial 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. PEEK is also radiation resistant and has a low coefficient of friction. It is used in the production of components such as tubes, bearings, seals, valves, electric insulation and even medical implants.

Mechanical Properties

Tensile modulus	3792 MPa
Tensile strength	99.9 MPa
Elongation at break	35%
Flexural strength	165.4 MPa
Flexural modulus	4.13 GPa
Hardness (Shore D)	230

Thermal Properties

Melting temperature (20°C/min)	150°C
Heat deflection temperature (1.80 MPa)	160°C
Softening temperature	250°C

Physical Properties

Density	1.32 g/cm ³
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Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.