



Industrial PEEK

Alternative Designations

Key Features

Polyetheretherketone

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

Thermal Properties

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Tensile modulus	3792 MPa	Melting temperature (20°C/min)	150°C
Tensile strength	99.9 MPa	Heat deflection temperature (1.80 MPa)	160°C
Elongation at break	35%	Softening temperature	250°C
Flexural strength	165.4 MPa		
Flexural modulus	4.13 GPa		

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Physical Properties

Hardness (Shore D)

Density	1.32 g/cm ³
Deribity	1.52 8/ 6/11

Reference

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