

PEEK+30%GF refers to Polyetheretherketone reinforced with 30% Glass Fiber. It is a composite material that combines the properties of PEEK with the added strength and stiffness provided by the glass fiber reinforcement. The incorporation of glass fibers enhances the mechanical properties of PEEK, resulting in increased tensile strength, flexural strength, and stiffness.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic
Chemical Name	PEEK Polyetheretherketone
Additives	30% Glass Filled
Color	Tan
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.056
Water Absorption, 24 hrs, Immersion,% by wt.	0.1
Coefficient of Linear Thermal Expansion, x10 ⁻⁵ in./in./°F	1.2
Heat Deflection Temp,°F at 263psi	600
Melting Point Temp,°F	644
Max Continuous Operating Temp,°F	480
Minimum Operating Temp,°F	-76
Flammability Rating,UL94	V-0
Dielectric Strength,V/mil	500
Dielectric Constant at 1 MHz	3.7
Thermal Conductivity,BTU-in/ft ² -hr-°F	2.98

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	15
Tensile Modulus,ksi	900
Compressive Strength,ksi	26
Compressive Modulus,ksi	1,000
Flexural Strength,ksi	28
Flexural Modulus,ksi	1,000
Elongation at Break	3%
Hardness Rockell	M103
Notched Izod Impact Strength,ft-lb/in	0.8

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.