

Nylon 6/6-30%GF, also known as 30% Glass-Filled Nylon 6/6, is a composite material that combines Nylon 6/6 with 30% glass fiber reinforcement. This results in a material with increased strength, stiffness, and dimensional stability compared to unfilled Nylon 6/6. The glass fibers provide enhanced mechanical properties, making it suitable for applications that require high strength and rigidity.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic
Chemical Name	PA Polyamide Type 6/6
Additives	30% Glass filled
Color	Yellow
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.047
Water Absorption, 24 hrs, Immersion,% by wt.	0.3
Coefficient of Linear Thermal Expansion, x10 ⁻⁵ in./in./°F	2
Heat Deflection Temp,°F at 263psi	400
Melting Point Temp,°F	500
Max Continuous Operating Temp,°F	220
Minimum Operating Temp,°F	-22
Flammability Rating,UL94	V-2
Dielectric Strength,V/mil	350
Surface Resistivity,ohm/square	>10 ¹³

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	13.5
Tensile Modulus,ksi	675
Compressive Strength,ksi	16
Compressive Modulus,ksi	600
Flexural Strength,ksi	21
Flexural Modulus,ksi	650
Elongation at Break	5%
Hardness, Rockwell M	75
Notched Izod Impact Strength,ft-lb/in	0.6

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.