

PP stands for polypropylene, which is a versatile thermoplastic polymer widely used in various industries. It is known for its excellent chemical resistance, low density, good impact strength, and high heat resistance. It can be easily molded, extruded, or formed into different shapes and is available in various grades to meet specific requirements, such as impact resistance, stiffness, or temperature resistance.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic
Chemical Name	PP Polypropylene
Additives	Unfilled
Color	Natural
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.034
Water Absorption, 24 hrs, Immersion,% by wt.	<0.01
Coefficient of Linear Thermal Expansion, x10 ⁻⁵ in./in./°F	6.2
Heat Deflection Temp,°F at 263psi	125
Melting Point Temp,°F	327
Max Continuous Operating Temp,°F	180
Minimum Operating Temp,°F	14
Flammability Rating,UL94	HB
Dielectric Strength,V/mil	500
Dielectric Constant at 1 MHz	2.25
Thermal Conductivity,BTU-in/ft ² -hr-°F	0.76

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	4.8
Tensile Modulus,ksi	195
Compressive Strength,ksi	7
Flexural Strength,ksi	7
Flexural Modulus,ksi	180
Elongation at Break	400%
Hardness Shore D	78
Notched Izod Impact Strength,ft-lb/in	1.2

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.