

PP-H, or polypropylene homopolymer, is a type of polypropylene that is composed solely of propylene monomers. It is a high-performance thermoplastic with excellent mechanical properties, including high stiffness, strength, and chemical resistance. PP-H offers good dimensional stability, low moisture absorption, and high heat resistance.

Chemical Description

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

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in ³	0.033
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
Max Continuous Operating Temp,°F	180
Minimum Operating Temp,°F	14
Flammability Rating,UL94	HB
Dielectric Strength,V/mil	500-660
Dielectric Constant at 1 MHz	0.0005-0.0018
Thermal Conductivity,BTU-in/ft ² -hr-°F	0.76-0.81

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
Notched Izod Impact Strength,ft-lb/in	1.9

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.