POM-H

POM-H, also known as polyoxymethylene homopolymer or Delrin®, is a high-performance thermoplastic material. It is a highly crystalline and rigid polymer with excellent mechanical properties, including high strength, stiffness, and dimensional stability. POM-H offers low friction, good wear resistance, and excellent chemical resistance.

Chemical Description

Description	Value
Material Type	Semi-Crystalline Thermoplastic
Chemical Name	POM Polyoxymethylene Acetal Homopolymer
Additives	Unfilled
Color	Natural (White Opaque)
UV Resistant	No

Mechanical Properties

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	11
Tensile Modulus,ksi	450
Compressive Strength,ksi	16
Compressive Modulus,ksi	450
Flexural Strength,ksi	13
Flexural Modulus,ksi	450
Elongation at Break	30%
Hardness Rockwell	M88/R122
Notched Izod Impact Strength,ft-lb/in	1

Physical Properties

Property	Maximum Unless Range is Specified
Density,lbs/in3	0.051
Water Absorption, 24 hrs, Immersion,% by wt.	0.2
Coefficient of Linear Thermal Expansion, x10-5 in./in./°F	4.7
Heat Deflection Temp,°F at 263psi	250
Melting Point Temp,°F	347
Max Continuous Operating Temp,°F	180
Minimum Operating Temp,°F	-58
Flammability Rating,UL94	HB
Dielectric Strength,V/mil	450
Dielectric Constant at 1 MHz	3.7
Thermal Conductivity,BTU-in/ft²-hr-°F	2.5

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.