

Nylon 12 is a thermoplastic material belonging to the polyamide family. It offers good mechanical strength, impact resistance, and flexibility. Nylon 12 has low moisture absorption, good chemical resistance, and dimensional stability. It is commonly used in applications such as automotive components, tubing, electrical connectors, and sporting goods.

Chemical Description

Description	Value
Material Type	Thermoplastic
Chemical Name	PA Polyamide Type 12
Additives	Unfilled
Color	Yellow
UV Resistant	No

Physical Properties

Property	Maximum Unless Range is Specified
Water Absorption,% by wt.	0.66
Moisture Content,%	0.25
Heat Deflection Temp,°F at 1.8MPa	189
Heat Deflection Temp,°F at 0.45MPa	340
Vicat Softening Temp,°F	347
Flammability Rating,UL94	HB

Mechanical Properties

Property	Maximum Unless Range is Specified
Ultimate Tensile Strength,ksi	7.26
Tensile Modulus,ksi	268
Flexural Strength,ksi	9.5
Flexural Modulus,ksi	232
Elongation at Break(X/Y)	11%
Elongation at Break(Z)	6%
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.