

Nylon

Aliphatic Polyamide

OVERVIEW

Nylon is a rigid mechanical thermoplastic with outstanding toughness, impact strength, electrical insulation and dimensional stability. Nylon is known for high heat deflection and outstanding performance within load-bearing and wear applications. Nylon is self-lubricating and comes in both cast type 6 and extruded type 6/6 grades. Cast type 6 nylon is more pliable with higher strength and dimensional stability. Extruded type 6/6 nylon has a higher melting point. Oil-filled, glass-filled and MD variations of nylon feature additives for enhancement of mechanical properties.

TECHNICAL DATA

PROPERTY	VALUE
Tensile Strength (psi)	11,800
Tensile Modulus (psi)	435,000
Flexural Strength (psi)	16,500
Flexural Modulus (psi)	460,000
Elongation at Break	~55%
Max Service Temperature	230° F
Izod Impact, Notched	0.9
Deflection Temperature	~300° F
Melting Point	450° F
Coefficient of Friction	0.22
Affixable Properties	Mech

APPLICATIONS & USES

Nylon is most often used to produce mechanical parts. Nylon is a great material when noise reduction and long part life are required and is often used to replace metal bearings and bushings.

- Bearings
- Bushings
- Gears
- Screws
- Sheaves
- Machinery components
- Stress components
- Seals
- Gaskets
- Wear pads
- Wheels and rollers

The data provided gives the typical properties of the material. These are "typical" properties only, and should not be used for specification purposes. This information is based on our experience to date and we believe it to be reliable. It is intended to be used only as a guide at your discretion and risk. Jade cannot guarantee favorable results and assumes no liability in connection with the use of this product. None of this information is to be taken as a license to operate under, or recommendation to infringe, any patents.