Nylon

Aliphatic Polyamide

Description and 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.

Nylon is available in cast, extruded, bar, & a variety of specialty grades.

Full sheet: 48" x 120" (0.25" through 4" thick)
Rod: (1.0" through 6.0" diameter)

Applications and 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

Properties and Specifications

Property	Cast Nylon
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

Properties are typical.
Chem is an abbreviation for chemically affixed with glues, chemicals, or adhesive.
Mech is an abbreviation for mechanically affixed bonding.
Field testing is recommended for any application.

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330 Commerce Circle
Sacramento, CA 95815
800-742-3444
interstateam.com

⚠ WARNING: This product can expose you to chemicals including N,N-Dimethylformamide, CAS 68-12-2, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

⚠ WARNING: This product can expose you to chemicals including METHYLPYRROLIDONE, CAS 872-50-4, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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