Cast Nylon MD

Gray Cast Nylon 6 MoS2-Filled Sheet

Description and Overview

Nylon MD is a molybdenum disulfide (MoS2) filled cast nylon material. It features similar properties to Nylon GS, including extra lubricity that allows it to operate with little to no lubrication. It has superior strength, toughness, rigidity, and wear resistance compared to standard cast nylon.

Nylon MD has a low coefficient of friction and good mechanical and electrical properties.



Nylon MD is available in sheet, rod, and tube shapes. Thicknesses: .25" to 4" Rod Diameters: 1" to 25" Tube Diameters: Max 18" OD

Properties and Specifications

Property	Nylon MD
Specific Gravity	1.15 - 1.17
Tensile Modulus	400,000 - 550,000 psi
Tensile Strength	10,000 - 13,500 psi
Flexural Modulus	400,000 - 520,000 psi
Flexural Strength	15,000 - 18,000 psi
Hardness, Rockwell	R110 - R120
Water Absorption @ 24 hrs.	0.5 - 0.6%
Impact Strength, Izod	1.4 - 2.4 ft-lb/in.
Friction Coefficient	0.22
Deflection Temperature	200° - 300°F @ 264 psi
Affixable Properties	Chem / 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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Applications and Uses

Nylon MD's built-in MoS2 lubricant is dry and can be used in environments where external lubrication is difficult or impossible.

- Gears
- Sheaves
- Sprockets
- Pulleys
- Wear Pads/Plates
- Wear Shoes
- Bearings
- Custom Parts

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