Material Datasheet

Nylon

Nylon (polyamide) is well-known for its impressive durability, high strength-to-weight ratio, flexibility, low friction, and corrosion resistance. With its ability to withstand significant mechanical stress.

Common Applications

- Plastic gears
- Screws, nuts, bolts
- Flexible industrial parts
- Prosthetics, medical equipment
- Gears, fixtures and door hinges
- Automobile parts

Physical Properties	Standard	Unit	Typical Value
Density	ASTM D792	g/cm^3	1.12
Melt Flow Index	ASTM D1238	g/10 min	5(230°C/2.16Kg)

Mechanical Properties	Standard	Unit	Typical Value
Tensile Strength	ASTM D882	MPa	57
Elongation at Break	ASTM D882	%	196
Flexural Strength	ASTM D790	MPa	57
Flexural Modulus	ASTM D790	MPa	1495
Izod Impact Strength	ASTM D256	KJ/m^2	15

Thermal Properties	Standard	Unit	Typical Value
Glass Transition Temperature (Tg)	ASTM D3418	°C	105