

Nylon



Generic Data :

Technical Name	Z-ABS
Process	Machining
Accuracy	(+/-)300 µm
Maximum Build Size	400x400x300 mm

Nylon unlike others, is a semicrystalline, non-condensing, open ring polyamide. By using comonomers or stabilizers, nylon properties can be modified during polymerization. By this we can introduce new chain end or functional groups, which changes the reactivity and chemical properties.

Characteristics

- + High machinability
- + Lightweight
- + High Impact strength
- + Self-lubricating, less friction
- High distortions can cause failure
- Does not absorb water well
- Pollution problems associated with its use
- Not suitable for UV, flame and high temp applications

Applications

- ✓ Sports equipment
- ✓ Power tool housings
- ✓ Gears, machinery parts
- ✓ Electronics components Toys, consumer products

Material Properties	Value	Unit	Standard Test Method
Density	1.15	g/cm ³	ASTM DATA
Natural Color	Semi transparent	-	-
Mechanical Properties			
Tensile Strength	79	MPa	ASTM DATA
Ultimate Tensile Strength	82.7	MPa	ASTM DATA
Elongation at Break	60	%	ISO DATA
Charpy notched impact strength	-	-	-
Izod Impact notched (23°C)	0.587	J/cm	ASTM DATA
Hardness, Rockwell R	115	-	-
Thermal Properties			
Heat Deflection Temp. under load @ 1.8 MPa	90	°C	Annealed; ASTM DATA
Vicat Softening Temperature	-	-	-