

ExxonMobil™ PP7033N

Polypropylene Impact Copolymer

Product Description

A high crystallinity, high stiffness, high impact copolymer resin designed for injection molding applications requiring medium melt flow rate, good processing characteristics and improved cycle time.

General

Features	- Balanced Stiffness/Toughness - Fast Molding Cycle	- High Impact Resistance - High Stiffness	- Medium Flow - Nucleated
Uses	- Appliances - Automotive Applications	- Child Safety Seats - Consumer Applications	- Industrial Applications - Rigid Packaging
Appearance	Natural Color		
Form(s)	Pellets		
Processing Method	Injection Molding		

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Density	0.900 g/cm ³	0.900 g/cm ³	ExxonMobil Method

Mechanical	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield			ASTM D638
2.0 in/min (51 mm/min)	3760 psi	25.9 MPa	
Tensile Stress at Yield	3740 psi	25.8 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	5.2 %	5.2 %	ASTM D638
Tensile Strain at Yield	4.0 %	4.0 %	ISO 527-2/50
Tensile Modulus	192000 psi	1330 MPa	ISO 527-2/1
Flexural Modulus - 1% Secant			
0.051 in/min (1.3 mm/min)	197000 psi	1360 MPa	ASTM D790A
0.51 in/min (13 mm/min)	224000 psi	1540 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	182000 psi	1260 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (73°F (23°C))	4.0 ft-lb/in	210 J/m	ASTM D256A
Notched Izod Impact Strength			ISO 180/1A
-40°F (-40°C)	1.9 ft-lb/in ²	3.9 kJ/m ²	
0°F (-18°C)	2.3 ft-lb/in ²	4.9 kJ/m ²	
73°F (23°C)	6.1 ft-lb/in ²	13 kJ/m ²	
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.2 ft-lb/in ²	4.7 kJ/m ²	
-4°F (-20°C)	2.5 ft-lb/in ²	5.3 kJ/m ²	
32°F (0°C)	3.5 ft-lb/in ²	7.3 kJ/m ²	
73°F (23°C)	6.2 ft-lb/in ²	13 kJ/m ²	
Gardner Impact			ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	202 in-lb	22.8 J	

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	126 °F	52.0 °C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	197 °F	91.5 °C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	212 °F	100 °C	ASTM D648

