

ExxonMobil™ PP7032E2

Polypropylene Impact Copolymer

Product Description

A high crystallinity, high impact copolymer resin designed for injection molding, extrusion and thermoforming applications.

General

Features	- Good Colorability - Good Dimensional Stability	- Good Thermal Stability - Medium Flow	
Uses	- Automotive Applications - Caps	- Closures - Compounding	- Packaging - 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)	4.0 g/10 min	4.0 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 2.0 in/min (51 mm/min)	3480 psi	24.0 MPa	ASTM D638
Tensile Stress at Yield	3390 psi	23.4 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	6.4 %	6.4 %	ASTM D638
Tensile Strain at Yield	6.2 %	6.2 %	ISO 527-2/50
Flexural Modulus - 1% Secant 0.051 in/min (1.3 mm/min)	164000 psi	1130 MPa	ASTM D790A
0.51 in/min (13 mm/min)	188000 psi	1300 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	165000 psi	1140 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (0°F (-18°C))	1.3 ft-lb/in	69 J/m	ASTM D256A
Notched Izod Impact Strength			ISO 180/1A
-40°F (-40°C)	3.0 ft-lb/in ²	6.3 kJ/m ²	
-4°F (-20°C)	3.4 ft-lb/in ²	7.2 kJ/m ²	
73°F (23°C)	21 ft-lb/in ²	45 kJ/m ²	
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.0 ft-lb/in ²	6.4 kJ/m ²	
-4°F (-20°C)	3.2 ft-lb/in ²	6.8 kJ/m ²	
32°F (0°C)	4.5 ft-lb/in ²	9.5 kJ/m ²	
73°F (23°C)	23 ft-lb/in ²	48 kJ/m ²	
Gardner Impact			ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	219 in-lb	24.7 J	

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	120 °F	48.7 °C	ISO 75-2/Af
Heat Deflection Temperature (0.45 MPa)	171 °F	77.4 °C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	180 °F	82.1 °C	ASTM D648
DTUL @ 66psi - Annealed	230 °F	110 °C	ASTM D648

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	87	87	ASTM D785

