

ExxonMobil™ PP7033E3

Polypropylene Impact Copolymer

Product Description

An impact copolymer resin designed for consumer and industrial products requiring high impact resistance.

General

Features	- Balanced Stiffness/Toughness - High Impact Resistance	- High Stiffness - Medium Flow	
Uses	- Consumer Applications - Containers	- Crates - Industrial Applications	- Pails - 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	0.9 g/cm ³	0.9 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)	3460 psi	23.9 MPa	
Tensile Stress at Yield	3350 psi	23.1 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	6.5 %	6.5 %	ASTM D638
Tensile Strain at Yield	5.6 %	5.6 %	ISO 527-2/50
Tensile Modulus	187000 psi	1290 MPa	ISO 527-2/1
Flexural Modulus - 1% Secant			
0.051 in/min (1.3 mm/min)	165000 psi	1140 MPa	ASTM D790A
0.51 in/min (13 mm/min)	186000 psi	1280 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	173000 psi	1190 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (73°F (23°C))	5.2 ft-lb/in	280 J/m	ASTM D256A
Notched Izod Impact Strength			ISO 180/1A
-40°F (-40°C)	1.9 ft-lb/in ²	4.0 kJ/m ²	
0°F (-18°C)	2.7 ft-lb/in ²	5.7 kJ/m ²	
73°F (23°C)	6.4 ft-lb/in ²	13 kJ/m ²	
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.0 ft-lb/in ²	4.3 kJ/m ²	
-4°F (-20°C)	2.6 ft-lb/in ²	5.4 kJ/m ²	
32°F (0°C)	3.2 ft-lb/in ²	6.7 kJ/m ²	
73°F (23°C)	6.6 ft-lb/in ²	14 kJ/m ²	
Gardner Impact			ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	249 in-lb	28.1 J	



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Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	124 °F	50.9 °C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	186 °F	85.3 °C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	194 °F	90.2 °C	ASTM D648
DTUL @ 66psi - Annealed	237 °F	114 °C	ASTM D648

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	89	89	ASTM D785

