

# ExxonMobil™ PP7033E3

## Polypropylene Impact Copolymer

### Product Description

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

### General

Availability <sup>1</sup>	▪ Asia Pacific
Features	<ul style="list-style-type: none"> <li>▪ Balanced Stiffness/Toughness</li> <li>▪ High Impact Resistance</li> <li>▪ High Stiffness</li> <li>▪ Medium Flow</li> </ul>
Uses	<ul style="list-style-type: none"> <li>▪ Consumer Applications</li> <li>▪ Containers</li> <li>▪ Crates</li> <li>▪ Industrial Applications</li> <li>▪ Pails</li> <li>▪ Rigid Packaging</li> </ul>
Appearance	▪ Natural Color
Form(s)	▪ Pellets
Processing Method	▪ Injection Molding
Revision Date	▪ 03/01/2010

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 <sup>3</sup>	0.9 g/cm <sup>3</sup>	ExxonMobil Method

Mechanical	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield 2.0 in/min (51 mm/min)	3460 psi	23.9 MPa	ASTM D638
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 <sup>2</sup>	4.0 kJ/m <sup>2</sup>	
0°F (-18°C)	2.7 ft-lb/in <sup>2</sup>	5.7 kJ/m <sup>2</sup>	
73°F (23°C)	6.4 ft-lb/in <sup>2</sup>	13 kJ/m <sup>2</sup>	
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	2.0 ft-lb/in <sup>2</sup>	4.3 kJ/m <sup>2</sup>	
-4°F (-20°C)	2.6 ft-lb/in <sup>2</sup>	5.4 kJ/m <sup>2</sup>	
32°F (0°C)	3.2 ft-lb/in <sup>2</sup>	6.7 kJ/m <sup>2</sup>	
73°F (23°C)	6.6 ft-lb/in <sup>2</sup>	14 kJ/m <sup>2</sup>	
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

#### Legal Statement

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

#### Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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