

# 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	• Balanced Stiffness/Toughness • High Impact Resistance	• High Stiffness • Medium Flow	• Nucleated
Uses	• Appliances • Child Safety Seats	• Consumer Applications • Containers	• Industrial Applications • Rigid Packaging
Appearance	• Natural Color		
Form(s)	• Pellets		
Processing Method	• Injection Molding		
Revision Date	• March 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 0.050 in/min (1.3 mm/min)	165000 psi	1140 MPa	ASTM D790A
0.50 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

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

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**ExxonMobil Chemical ExxonMobil™ PP7033E3  
Polypropylene Impact Copolymer**

<b>Impact</b>	<b>Typical Value (English)</b>	<b>Typical Value (SI)</b>	<b>Test Based On</b>
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 <sup>2</sup>			ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm)	249 in-lb	28.1 J	

<b>Thermal</b>	<b>Typical Value (English)</b>	<b>Typical Value (SI)</b>	<b>Test Based On</b>
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			ASTM D648
--	194 °F	90.2 °C	
DTUL @ 66psi - Annealed	237 °F	114 °C	ASTM D648

<b>Hardness</b>	<b>Typical Value (English)</b>	<b>Typical Value (SI)</b>	<b>Test Based On</b>
Rockwell Hardness	89	89	ASTM D785

**Legal Statement**

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

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.

**Notes**

<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.

<sup>2</sup> Geometry GC

For additional technical, sales and order assistance:

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