

# ExxonMobil™ PP7143KNE1

## Polypropylene Impact Copolymer

### Product Description

A high impact copolymer resin designed for consumer and industrial applications.

### General

Availability <sup>1</sup>	▪ North America
Features	<ul style="list-style-type: none"> <li>▪ Good Colorability</li> <li>▪ Good Dimensional Stability</li> <li>▪ Good Mold Release</li> <li>▪ Good Thermal Stability</li> <li>▪ Medium Flow</li> <li>▪ Nucleated</li> </ul>
Uses	<ul style="list-style-type: none"> <li>▪ Containers</li> <li>▪ Industrial Applications</li> <li>▪ Pallets</li> </ul>
Appearance	▪ Natural Color
Form(s)	▪ Pellets
Processing Method	▪ Injection Molding
Revision Date	▪ 09/27/2019

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10 g/10 min	10 g/10 min	ASTM D1238
Density	0.900 g/cm <sup>3</sup>	0.900 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)	3070 psi	21.1 MPa	ASTM D638
Tensile Stress at Yield	3020 psi	20.8 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	4.8 %	4.8 %	ASTM D638
Tensile Strain at Yield	4.7 %	4.7 %	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))	166000 psi	1140 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact 0°F (-18°C)	1.7 ft-lb/in	91 J/m	ASTM D256A
73°F (23°C)	No Break	No Break	
Notched Izod Impact Strength -40°F (-40°C)	3.8 ft-lb/in <sup>2</sup>	7.9 kJ/m <sup>2</sup>	ISO 180/1A
73°F (23°C)	24 ft-lb/in <sup>2</sup>	51 kJ/m <sup>2</sup>	
Charpy Notched Impact Strength -4°F (-20°C)	4.7 ft-lb/in <sup>2</sup>	9.9 kJ/m <sup>2</sup>	ISO 179/1eA
73°F (23°C)	26 ft-lb/in <sup>2</sup>	56 kJ/m <sup>2</sup>	
Gardner Impact -20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	> 320 in-lb	> 36.2 J	ASTM D5420

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	122 °F	49.9 °C	ISO 75-2/ Af
Heat Deflection Temperature (0.45 MPa)	188 °F	86.4 °C	ISO 75-2/ Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	203 °F	94.9 °C	ASTM D648
DTUL @ 66psi - Annealed	236 °F	113 °C	ASTM D648

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	80	80	ASTM D785

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#### 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. For detailed Product Stewardship information, please contact Customer Service.

#### 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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