

ExxonMobil™ PP7143KNE1

Polypropylene Impact Copolymer

Product Description

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

General

Features	- Good Colorability - Good Dimensional Stability	- Good Mold Release - Good Thermal Stability	- Medium Flow - Nucleated
Uses	Containers	Industrial Applications	Pallets
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)	10 g/10 min	10 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)	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 ²	7.9 kJ/m ²	ISO 180/1A
73°F (23°C)	24 ft-lb/in ²	51 kJ/m ²	
Charpy Notched Impact Strength -4°F (-20°C)	4.7 ft-lb/in ²	9.9 kJ/m ²	ISO 179/1eA
73°F (23°C)	26 ft-lb/in ²	56 kJ/m ²	
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

