ExxonMobil Signature Polymers

ExxonMobil™ PP7143KNE1

Polypropylene Impact Copolymer

Product Description

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

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ North America	
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		
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/cm³	0.900	g/cm³	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)	3070	psi	21.1	MPa	
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					ASTM D256A
0°F (-18°C)	1.7	ft·lb/in	91	J/m	
73°F (23°C)	No Break		No Break		
Notched Izod Impact Strength					ISO 180/1A
-40°F (-40°C)	3.8	ft·lb/in²	7.9	kJ/m²	
73°F (23°C)	24	ft·lb/in²	51	kJ/m²	
Charpy Notched Impact Strength					ISO 179/1eA
-4°F (-20°C)	4.7	ft·lb/in²	9.9	kJ/m²	
73°F (23°C)	26	ft·lb/in²	56	kJ/m²	
Gardner Impact					ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	> 320	in·lb	> 36.2	J	

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Heat Deflection Temperature (1.80 MPa)					ExxonMobil Method
Flatwise	122	°F	49.9	°C	
Heat Deflection Temperature (0.45 MPa)					ExxonMobil Method
Flatwise	188	°F	86.4	°C	
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	203	°F	94.9	°C	ExxonMobil Method
DTUL (66 psi) - Annealed	236	°F	113	°C	ExxonMobil Method

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Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	80	80	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. For detailed Product Stewardship information, please contact Customer Service.

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.

[1] 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: Contact Us

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