ExxonMobil Signature Polymers

ExxonMobil™ PP7684KNE1

Polypropylene Impact Copolymer

Product Description

A high crystallinity, high impact copolymer resin with medium melt flow rate and excellent processing attributes. It is designed to optimize cycle times by improving mold release of injection molded parts.

General

Availability [1]	▪ Africa & Middle East ▪ Europe	▪ Latin America ▪ North America	
Features	▪ Antistatic ▪ Balanced Stiffness/Toughness	▪ Fast Molding Cycle ▪ Good Mold Release	▪ Medium Impact Resistance ▪ Nucleated
Uses	▪ Appliances ▪ Consumer Applications	▪ Crates ▪ Industrial Applications	▪ Packaging ▪ Tool/Tote Box
Appearance	▪ Natural Color		
Form(s)	▪ Pellets		
Processing Method	▪ Compounding	▪ Injection Molding	
Revision Date	▪ 10/01/2018		

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	19	g/10 min	19	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)	3450	psi	23.8	MPa	
Tensile Stress at Yield	3350	psi	23.1	MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	4.5	%	4.5	%	ASTM D638
Tensile Strain at Yield	4.2	%	4.2	%	ISO 527-2/50
Flexural Modulus - 1% Secant					
0.051 in/min (1.3 mm/min)	185000	psi	1280	MPa	ASTM D790A
0.51 in/min (13 mm/min)	214000	psi	1480	MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	185000	psi	1280	MPa	ISO 178

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact (73°F (23°C))	3.0	ft·lb/in	160	J/m	ASTM D256A
Notched Izod Impact Strength					ISO 180/1A
-40°F (-40°C)	3.4	ft·lb/in²	7.2	kJ/m²	
-4°F (-20°C)	3.7	ft·lb/in²	7.7	kJ/m²	
73°F (23°C)	6.8	ft·lb/in²	14	kJ/m²	
Charpy Notched Impact Strength					ISO 179/1eA
-22°F (-30°C)	3.5	ft·lb/in²	7.3	kJ/m²	
-4°F (-20°C)	3.6	ft·lb/in²	7.5	kJ/m²	
32°F (0°C)	4.3	ft·lb/in²	9.0	kJ/m²	
73°F (23°C)	6.5	ft·lb/in²	14	kJ/m²	
Gardner Impact					ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	197	in·lb	22.3	J	

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Heat Deflection Temperature (1.80 MPa)	122	°F	50.1	°C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	191	°F	88.5	°C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	221	°F	105	°C	ASTM D648

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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: www.exxonmobilchemical.com/ContactUs

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