Product Datasheet

ExxonMobil Signature Polymers

Exceed™ Tough PP8285E1

Polypropylene Impact Copolymer

Product Description

A high crystallinity, high impact copolymer resin designed for injection molded applications requiring excellent processing attributes.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Features	▪ Balanced Stiffness/Toughness ▪ Good Impact Resistance	▪ Good Processability ▪ Heat Aging Resistant	▪ Nucleated
Uses	▪ Appliance Components	▪ Automotive Applications	▪ Industrial Applications
Appearance	▪ Natural Color		
Form(s)	▪ Pellets		
Processing Method	▪ Compounding	▪ Injection Molding	
Revision Date	▪ 06/15/2026		

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	30	g/10 min	30	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)	2990	psi	20.6	MPa	
Tensile Stress at Yield	2920	psi	20.1	MPa	ISO 527-2
Elongation at Yield	6.1	%	6.1	%	ASTM D638
Tensile Strain at Yield	5.4	%	5.4	%	ISO 527-2
Flexural Modulus - 1% Secant					
0.051 in/min (1.3 mm/min)	148000	psi	1020	MPa	ASTM D790A
0.51 in/min (13 mm/min)	167000	psi	1150	MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	148000	psi	1020	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	92	J/m	
73°F (23°C)	No Break		No Break		
Notched Izod Impact Strength					ISO 180/1A
-40°F (-40°C)	3.0	ft·lb/in²	6.3	kJ/m²	
-22°F (-30°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)	22	ft·lb/in²	47	kJ/m²	
Charpy Notched Impact Strength					ISO 179/1eA
-40°F (-40°C)	2.4	ft·lb/in²	5.0	kJ/m²	
-22°F (-30°C)	3.5	ft·lb/in²	7.3	kJ/m²	
-4°F (-20°C)	3.9	ft·lb/in²	8.2	kJ/m²	
73°F (23°C)	26	ft·lb/in²	55	kJ/m²	
Gardner Impact					ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	257	in·lb	29.0	J	

Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	118 °F	48.0 °C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	183 °F	84.0 °C	ISO 75-2/B
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	198 °F	92.0 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	122 °F	50.0 °C	ASTM D648

Legal Statement

This product is not intended for use in food contact application.

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.

[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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