Product Datasheet

ExxonMobil Signature Polymers

Exceed™ PP8864E1

Polypropylene Impact Copolymer

Product Description

Exceed™ PP8864E1 is a medium flow very high impact copolymer resin specifically designed for injection molding applications requiring good processing characteristics.

General

Availability [1]	▪ Asia Pacific	
Features	▪ Balanced Stiffness/Toughness ▪ High Impact Resistance	▪ Medium Flow ▪ Nucleated
Uses	▪ Automotive Applications	▪ Industrial Applications
Appearance	▪ Natural Color	
Form(s)	▪ Pellets	
Processing Method	▪ Compounding	▪ Injection Molding
Revision Date	▪ 01/24/2024	

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	14	g/10 min	14	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)	2970	psi	20.5	MPa	
Tensile Stress at Yield	2930	psi	20.2	MPa	ISO 527-2
Elongation at Yield	5.5	%	5.5	%	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)	153000	psi	1050	MPa	ASTM D790A
0.51 in/min (13 mm/min)	174000	psi	1200	MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	161000	psi	1110	MPa	ISO 178

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact					
-20°F (-29°C)	1.3	ft·lb/in	68	J/m	ASTM D256A
0°F (-18°C) [2]	1.8	ft·lb/in	96	J/m	ASTM D256
32°F (0°C)	3.0	ft·lb/in	160	J/m	ASTM D256A
73°F (23°C) [2]	No Break		No Break		ASTM D256
Notched Izod Impact Strength					ISO 180
-22°F (-30°C)	3.1	ft·lb/in²	6.4	kJ/m²	
-4°F (-20°C)	3.6	ft·lb/in²	7.7	kJ/m²	
32°F (0°C)	5.9	ft·lb/in²	12	kJ/m²	
73°F (23°C)	24	ft·lb/in²	51	kJ/m²	
Charpy Notched Impact Strength					ISO 179/1eA
-4°F (-20°C)	3.5	ft·lb/in²	7.4	kJ/m²	
32°F (0°C)	4.6	ft·lb/in²	9.7	kJ/m²	
73°F (23°C)	29	ft·lb/in²	62	kJ/m²	

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Heat Deflection Temperature (1.80 MPa)	119	°F	48.4	°C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	182	°F	83.2	°C	ISO 75-2/B

Hardness	Typical Value (English)		Typical Value (SI)		Test Based On
Rockwell Hardness	64		64		ASTM D785

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

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Legal Statement

This product, including the product name, shall not be used or tested in any medical application without 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.

[2] Notch A

For additional technical, sales and order assistance: Contact Us

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