

Product Datasheet



Achieve™ Advanced PP7985E1

Polypropylene Impact Copolymer

Product Description

Achieve™ Advanced PP7985E1 is a high crystallinity, low impact strength copolymer resin designed for compounding base or injection molding applications requiring high melt flow rate.

General

Availability ¹	▪ Asia Pacific	▪ Europe	
Features	▪ High Flow	▪ High Stiffness	▪ Nucleated
Uses	▪ Automotive Applications	▪ Compounding	
Appearance	▪ Natural Color		
Form(s)	▪ Pellets		
Processing Method	▪ Extrusion	▪ Injection Molding	
Revision Date	▪ 03/04/2022		

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	65 g/10 min	65 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	4350 psi	30.0 MPa	ASTM D638
Tensile Stress at Yield	4260 psi	29.4 MPa	ISO 527-2
Elongation at Yield ³ (2.0 in/min (50 mm/min))	4.5 %	4.5 %	ASTM D638
Tensile Strain at Yield	4.2 %	4.2 %	ISO 527-2
Flexural Modulus - 1% Secant			
0.051 in/min (1.3 mm/min)	230000 psi	1590 MPa	ASTM D790A
0.51 in/min (13 mm/min)	259000 psi	1790 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	233000 psi	1610 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact			ASTM D256A
0°F (-18°C)	0.42 ft-lb/in	22 J/m	
32°F (0°C)	0.68 ft-lb/in	36 J/m	
73°F (23°C)	1.1 ft-lb/in	60 J/m	
Notched Izod Impact Strength			ISO 180/1A
-4°F (-20°C)	1.3 ft-lb/in ²	2.8 kJ/m ²	
32°F (0°C)	2.0 ft-lb/in ²	4.2 kJ/m ²	
73°F (23°C)	2.9 ft-lb/in ²	6.1 kJ/m ²	
Charpy Notched Impact Strength			ISO 179/1eA
-4°F (-20°C)	1.4 ft-lb/in ²	2.9 kJ/m ²	
32°F (0°C)	2.0 ft-lb/in ²	4.2 kJ/m ²	
73°F (23°C)	3.5 ft-lb/in ²	7.4 kJ/m ²	

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)			ExxonMobil Method
Flatwise	130 °F	54.7 °C	
Heat Deflection Temperature (0.45 MPa)			ExxonMobil Method
Flatwise	226 °F	108 °C	
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	244 °F	118 °C	ExxonMobil Method
DTUL (66 psi) - Annealed	259 °F	126 °C	ExxonMobil Method

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Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	102	102	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.

² 2 in/min

³ 2.0 in/min

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