

ExxonMobil™ PP7905E1

Polypropylene Impact Copolymer

Product Description

A high crystallinity, low impact strength copolymer resin designed for compounding base or injection molding applications requiring very high melt flow rate.

General

Features	▪ High Flow	▪ High Stiffness	▪ Nucleated
Uses	▪ Automotive Applications	▪ Compounding	
Appearance	▪ Natural Color		
Form(s)	▪ Pellets		
Processing Method	▪ Blow Molding	▪ Injection Molding	

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	100 g/10 min	100 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 Break	4870 psi	33.6 MPa	ASTM D638
Tensile Stress at Break	4640 psi	32.0 MPa	ISO 527-2/50
Elongation at Break	3.8 %	3.8 %	ASTM D638
Tensile Strain at Break	4.3 %	4.3 %	ISO 527-2/50
Flexural Modulus - 1% Secant			
0.051 in/min (1.3 mm/min)	272000 psi	1880 MPa	ASTM D790A
0.51 in/min (13 mm/min)	307000 psi	2120 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	264000 psi	1820 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact			ASTM D256A
0°F (-18°C)	0.45 ft-lb/in	24 J/m	
73°F (23°C)	0.66 ft-lb/in	35 J/m	
Notched Izod Impact Strength			ISO 180/1A
-40°F (-40°C)	1.1 ft-lb/in ²	2.4 kJ/m ²	
-4°F (-20°C)	1.2 ft-lb/in ²	2.5 kJ/m ²	
73°F (23°C)	2.2 ft-lb/in ²	4.7 kJ/m ²	
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	0.67 ft-lb/in ²	1.4 kJ/m ²	
-4°F (-20°C)	0.81 ft-lb/in ²	1.7 kJ/m ²	
32°F (0°C)	1.2 ft-lb/in ²	2.5 kJ/m ²	
73°F (23°C)	2.5 ft-lb/in ²	5.3 kJ/m ²	
Gardner Impact			ASTM D5420
-20°F (-29°C), 0.125 in (3.18 mm), Geometry GC	< 8.00 in-lb	< 0.904 J	

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	139 °F	59.4 °C	ISO 75-2/ Af
Heat Deflection Temperature (0.45 MPa)	243 °F	117 °C	ISO 75-2/ Bf
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	256 °F	125 °C	ASTM D648
DTUL @ 66psi - Annealed	264 °F	129 °C	ASTM D648

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	110	110	ASTM D785

