ExxonMobil

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

Availability [1]	▪ North America		
Features	▪ High Flow	▪ High Stiffness	▪ Nucleated
Uses	▪ Automotive Applications	▪ Compounding	
Appearance	▪ Natural Color		
Form(s)	▪ Pellets		
Processing Method	▪ Blow Molding	▪ Injection Molding	
Revision Date	▪ 12/01/2017		

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/cm³	0.900	g/cm³	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/in²	2.4	kJ/m²	
-4°F (-20°C)	1.2	ft·lb/in²	2.5	kJ/m²	
73°F (23°C)	2.2	ft·lb/in²	4.7	kJ/m²	
Charpy Notched Impact Strength					ISO 179/1eA
-22°F (-30°C)	0.67	ft·lb/in²	1.4	kJ/m²	
-4°F (-20°C)	0.81	ft·lb/in²	1.7	kJ/m²	
32°F (0°C)	1.2	ft·lb/in²	2.5	kJ/m²	
73°F (23°C)	2.5	ft·lb/in²	5.3	kJ/m²	
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

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Additional Information

ASTM D638 & ISO 527-2/50: No Yield

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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