ExxonMobil™ PP7031E2

Polypropylene Impact Copolymer

Product Description

An impact copolymer resin for extrusion applications with high melt viscosity and excellent rigidity, shock resistance and dimensional stability. It is designed for corrugated pipes, profiles, sheets and thermoforming .

General

Features	▪ High Impact Resistance ▪ High Stiffness	▪ Highly Crystalline ▪ Low Flow	▪ Nucleated
Uses	▪ Compounding ▪ Construction Applications	▪ Consumer Applications ▪ Corrugated Pipe	▪ Industrial Applications ▪ Tool/Tote Box
Appearance	▪ Natural Color		
Form(s)	▪ Pellets		
Processing Method	▪ Compression Molding ▪ Profile Extrusion	▪ Sheet Extrusion ▪ Thermoforming	

Physical	Typical Value (English)		Typical Value (SI)		Test Based On
Melt Mass-Flow Rate (MFR)					ISO 1133
230°C/2.16 kg	1.0	g/10 min	1.0	g/10 min	
230°C/5.0 kg	4.0	g/10 min	4.0	g/10 min	
Density	0.9	g/cm³	0.9	g/cm³	ExxonMobil Method

Mechanical	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Stress at Yield	4060	psi	28.0	MPa	ISO 527-2/50
Tensile Strain at Yield	8.0	%	8.0	%	ISO 527-2/50
Tensile Modulus - Secant	203000	psi	1400	MPa	ISO 527-2/1
Flexural Modulus - Secant	196000	psi	1350	MPa	ISO 178

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact Strength (73°F (23°C))	29	ft·lb/in²	60	kJ/m²	ISO 180/1A
Charpy Notched Impact Strength					ISO 179/1eA
-4°F (-20°C)	2.4	ft·lb/in²	5.0	kJ/m²	
32°F (0°C)	3.8	ft·lb/in²	8.0	kJ/m²	
73°F (23°C)	36	ft·lb/in²	75	kJ/m²	

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Melting Temperature (DSC)	327	°F	164	°C	ISO 3146
Peak Crystallization Temperature (DSC)	261	°F	127	°C	ISO 3146
Heat Deflection Temperature (1.80 MPa)	127	°F	53.0	°C	ISO 75-2/A
Heat Deflection Temperature (0.45 MPa)	199	°F	93.0	°C	ISO 75-2/B
Vicat Softening Temperature	300	°F	149	°C	ISO 306/A50

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Shore Hardness (Shore D)	62	62	ISO 868