Union Petrochemical Public Company Limited



ExxonMobilTM 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.

Key Features

- High Flow
- High Stiffness

		3. Nucleated	
General			
Availability ¹	North America		
Uses	Automotive Applications	Compounding	
Appearance	Natural Color		
Form(s)	• Pellets		
Processing Method	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/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 (1.3 mm/min)	307000 psi	2120 MPa	ASTM D790A ASTM D790B
Flexural Modulus			
(0.079 in/min (2.0 mm/min))	264000 psi	1820 MPa	ISO 178
mpact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact	Typical Value (Eligibil)	Typical Value (Ci)	ASTM D256A
0 °F (-18°C)	0.45 ft·lb/in	24 J/m	ASTIVI DZSOA
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		2	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 1.2 ft·lb/in²	1.7 kJ/m² 2.5 kJ/m²	
32°F (0 °C) 73 °F (23 °C)	2.5 ft·lb/in²	2.5 kJ/m²	
Gardner Impact	2.5 10-10/111	3.3 Kg/III	ASTM D5420
-20 °F (-29 °C), 0.125 in (3.18 mm), Geometry GC	< 8.00 in⋅lb	< 0.904 J	A31W D3420
Fhermal Programme Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MP		59.4 °C	ISO 75-2/Af
Heat Deflection Temperature (0.45 MP	·	117 °C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66 psi - Unannealed	256 °F	125 °C	ASTM D648
DTUL @ 66 psi - Annealed	264 °F	129 °C	ASTM D648
Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	110	110	ASTM D785
NOUNWEIL LIGIULESS	110	110	ASTIVI D703

Additional Information

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

Notes

Typical properties: these are not to be construed as specifications.

¹Product 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 please contact our sales representative ©2020-2021. Union Petrochemical. The user may forward, distribute, and/or photocopy this

©2020-2021. Union Petrochemical. The user may forward, distribute, and/or photocopy this copyrighted document only if unaltered and complete, including all of its headers, footers, disclaimers, and other information. You may not copy this document to a Web site. Union Petrochemical does not guarantee the typical (or other non-specification) values. Typical values only represent the values one would expect if the properties were tested in our laboratories with our test methods on the specified date. Some product properties are not frequently measured, and accordingly typical values may not be based upon a statistically relevant number of tests. Analysis may be performed on representative samples and not the actual product shipped. The information is this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. There is no warranty against patent infringement, not any endorsement of any product or process, and we expressly disclaim any contrary implication.