Product Datasheet
Union Petrochemical Public Company Limited

ExxonMobil™ PP1304E4
Polypropylene Homopolymer

Product Description

A homopolymer resin designed for injection molding applications requiring excellent flow and good mechanical properties. It is suitable for general purpose applications such as toys, household goods, caps and closures.

Key Features

- Medium transparency
- High stiffness
- High surface hardness
- High heat
- Medium impact strength

General		
Availability[1]	• Asia Pacific	
Uses	• Caps • Closures	• Household Goods • Toys
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Compounding	• Injection Molding
Revision Date	• 03/01/2013	

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	13 g/10 min	13 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 Yield (2.0 in/min (51 mm/min))	5110 psi	35.2 MPa	ASTM D638
Tensile Stress at Yield	4840 psi	33.4 MPa	ISO 527-2/50
Elongation at Yield (2.0 in/min (51 mm/min))	9.4 %	9.4 %	ASTM D638
Tensile Strain at Yield	7.1 %	7.1 %	ISO 527-2/50
Tensile Modulus - Chord	230000 psi	1580 MPa	ISO 527-2/1
Flexural Modulus - 1% Secant			
0.051 in/min (1.3 mm/min)	218000 psi	1500 MPa	ASTM D790A
0.51 in/min (13 mm/min)	256000 psi	1770 MPa	ASTM D790B
Flexural Modulus (0.079 in/min (2.0 mm/min))	207000 psi	1430 MPa	ISO 178

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (73°F (23°C))	0.41 ft-lb/in	22 J/m	ASTM D256A
Notched Izod Impact Strength (73°F (23°C))	1.5 ft-lb/in²	3.1 kJ/m²	ISO 180/1A
Charpy Notched Impact Strength (73°F (23°C))	1.0 ft-lb/in²	2.2 kJ/m²	ISO 179/1eA
Gardner Impact 73°F (23°C), 0.125 in (3.18 mm), Geometry GC	86.1 in-lb	9.73 J	ASTM D5420

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Heat Deflection Temperature (1.80 MPa)	126 °F	52.0 °C	ISO 75-2/Af
Heat Deflection Temperature (0.45 MPa)	177 °F	80.6 °C	ISO 75-2/Bf
Deflection Temperature Under Load (DTUL) at 66psi – Unannealed	198 °F	92.4 °C	ASTM D648
DTUL at 66psi – Annealed	237 °F	114 °C	ASTM D648

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Rockwell Hardness	107	107	ASTM D785
Shore Hardness (15 sec)	67	67	ISO 868

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 please contact our sales representative