ExxonMobil™ PP7045E1
Polypropylene Impact Copolymer

Product Description
ExxonMobil PP7045E1 is a high crystallinity, medium copolymer resin with high melt flow rate and excellent processing attributes. It is designed for applications requiring long-term heat-aging resistance and excellent finished part appearance.

General
- **Availability**: Latin America, North America
- **Features**: Good Colorability, Good Processability, High Stiffness, Low Warpage, Medium Impact Resistance, Thermal Aging Resistant
- **Uses**: Appliances, Automotive Applications, Consumer Applications
- **Appearance**: Natural Color
- **Form(s)**: Pellets
- **Processing Method**: Compounding, Injection Molding
- **Revision Date**: 05/24/2023

Physical
- **Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)**: 35 g/10 min
- **Density**: 0.900 g/cm³

Mechanical
- **Tensile Strength at Yield** (2.0 in/min (51 mm/min)): 3670 psi, 25.3 MPa
- **Tensile Stress at Yield**: 3600 psi, 24.8 MPa
- **Elongation at Yield (2.0 in/min (51 mm/min))**: 4.4 %
- **Tensile Strain at Yield**: 4.1 %
- **Flexural Modulus - 1% Secant**
  - 0.051 in/min (1.3 mm/min): 203000 psi, 1400 MPa
  - 0.51 in/min (13 mm/min): 232000 psi, 1600 MPa
- **Flexural Modulus** (0.079 in/min (2.0 mm/min)): 197000 psi, 1360 MPa

Impact
- **Notched Izod Impact**
  - 0°F (-18°C): 0.80 ft·lb/in, 43 J/m
  - 73°F (23°C): 1.4 ft·lb/in, 75 J/m
- **Notched Izod Impact Strength**
  - -40°F (-40°C): 2.3 ft·lb/in², 4.8 kJ/m²
  - -4°F (-20°C): 2.5 ft·lb/in², 5.3 kJ/m²
  - 73°F (23°C): 4.4 ft·lb/in², 9.3 kJ/m²
- **Charpy Notched Impact Strength**
  - -22°F (-30°C): 2.1 ft·lb/in², 4.4 kJ/m²
  - -4°F (-20°C): 2.1 ft·lb/in², 4.5 kJ/m²
  - 32°F (0°C): 2.4 ft·lb/in², 5.0 kJ/m²
  - 73°F (23°C): 3.7 ft·lb/in², 7.7 kJ/m²
- **Gardner Impact**
  - -20°F (-29°C), 0.125 in (3.18 mm), Geometry GC: 169 in/lb, 19.1 J

Thermal
- **Heat Deflection Temperature (1.80 MPa)**: 131 °F
- **Heat Deflection Temperature (0.45 MPa)**: 208 °F
- **Deflection Temperature Under Load (DTUL) at 66psi - Unannealed**: 226 °F
- **DTUL (66 psi) - Annealed**: 248 °F

Effective Date: 05/24/2023
### Hardness

<table>
<thead>
<tr>
<th>Test Based On</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
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<tbody>
<tr>
<td>Rockwell Hardness</td>
<td>91</td>
<td>91</td>
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<tr>
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### Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

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.

### 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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