Product Datasheet
**Union Petrochemical Public Company Limited**

# ExxonMobil™ PP7032E3
## Polypropylene Impact Copolymer

| Product Description | Key Features |
|---|---|
| An impact copolymer resin designed for consumer and industrial products requiring very high impact resistance. | 1. Balanced Stiffness/Toughness<br>2. High Stiffness<br>3. Medium Flow<br>4. Ultra High Impact Resistance |

| General | | | |
|---|---|---|---|
| Availability[1] | • Asia Pacific | | |
| Uses | • Appliance Components | • Consumer Applications | • Rigid Packaging |
| | • Battery Cases | • Industrial Applications | • Toys |
| Appearance | • Natural Color | | |
| Form(s) | • Pellets | | |
| Processing Method | • Injection Molding | | |
| Revision Date | • 08/01/2015 | | |

| Physical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Melt Mass-Flow Rate (MFR) (230 °C/2.16 kg) | 4.0 g/10 min | 4.0 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 Yield | | | ASTM D638 |
| 2.0 in/min (51 mm/min) | 3440 psi | 23.7 MPa | |
| Tensile Stress at Yield | 3340 psi | 23.0 MPa | ISO 527-2/50 |
| Elongation at Yield (2.0 in/min (51 mm/min)) | 6.0 % | 6.0 % | ASTM D638 |
| Tensile Strain at Yield | 5.6 % | 5.6 % | ISO 527-2/50 |
| Tensile Modulus | 173000 psi | 1200 MPa | ISO 527-2/1 |
| Flexural Modulus – 1% Secant | | | |
| 0.051 in/min (1.3 mm/min) | 176000 psi | 1210 MPa | ASTM D790A |
| 0.51 in/min (13 mm/min) | 188000 psi | 1300 MPa | ASTM D790B |
| Flexural Modulus (0.079 in/min (2.0 mm/min)) | 165000 psi | 1140 MPa | ISO 178 |

| Impact | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Notched Izod Impact(73 °F (23 °C)) | No Break | No Break | ASTM D256A |
| Notched Izod Impact Strength | | | ISO 180/1A |
| -40 °F (-40°C) | 4.3 ft·lb/in$^2$ | 9.0 kJ/m$^2$ | |
| 0 °F (-18 °C) | 5.2 ft·lb/in$^2$ | 11 kJ/m$^2$ | |
| 73 °F (23 °C) | 25 ft·lb/in$^2$ | 53 kJ/m$^2$ | |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -22 °F (-30 °C) | 3.2 ft·lb/in$^2$ | 6.8 kJ/m$^2$ | |
| 73 °F (23 °C) | 27 ft·lb/in$^2$ | 57 kJ/m$^2$ | |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Heat Deflection Temperature (1.80 MPa) | 122 °F | 50.2 °C | ISO 75-2/A |
| Heat Deflection Temperature (0.45 MPa) | 180 °F | 82.0 °C | ISO 75-2/Bf |
| Deflection Temperature Under Load (DTUL) at 66 psi - Unannealed | 195 °F | 90.6 °C | ASTM D648 |
| DTUL @ 66 psi - Annealed | 234 °F | 112 °C | ASTM D648 |

| Hardness | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Rockwell Hardness | 84 | 84 | ASTM D785 |

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