# ExxonMobil™ PP5032E3

## Polypropylene Homopolymer

| Product Description | Key Features |
|---|---|
| PP 5032E3 is a polypropylene homopolymer type designed for production of monofilaments, tapes for the textile industry, geo textiles, fibrillated tapes for ropes and twines in the packaging, agriculture and fishing industries and suitable for chill roll and water bath lines. | 1. Low Water Carryover |

| General | | | |
|---|---|---|---|
| Availability [1] | • Africa & Middle East | • Asia Pacific | |
| Uses | • Consumer Application<br>• Fabrics | • Fibers<br>• Heavy-duty Bags | • Packaging |
| Appearance | • Natural Color | | |
| Form(s) | • Pellets | | |
| Processing Method | • Extrusion | • Filament Extrusion | • Thermoforming |
| Revision Date | • 09/01/2018 | | |

| Physical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Melt Mass-Flow Rate (MFR) (230 °C/2.16 kg) | 3.0 g/10 min | 3.0 g/10 min | ISO 1133 |
| Density | 0.900 g/cm$^3$ | 0.900 g/cm$^3$ | ExxonMobil Method |

| Mechanical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Tensile Stress at Yield | 4790 psi | 33.0 MPa | ISO 527-2/1A/50 |
| Tensile Strain at Yield | 9.0% | 9.0 % | ISO 527-2/1A/50 |
| Tensile Modulus | 209000 psi | 1440 MPa | ISO 527-2/1A/1 |
| 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 |
|---|---|---|---|
| Charpy Notched Impact Strength 73°F (23°C) | 2.1 ft*lb/in$^2$ | 4.5 kJ/m$^2$ | ISO 179/1eA |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Peak Melting Temperature | 320 °F | 160 °C | ASTM D3418 |
| Heat Deflection Temperature (0.45 MPa) | 187 °F | 86.0 °C | ISO 75-2/B |

| Hardness | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---|---|---|
| Shore Hardness (Shore D, 15 sec) | 70 | 70 | 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

©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.