

ExxonMobil™ PP1304E6

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.

General

| | |
|---------------------------|---|
| Availability ¹ | • Asia Pacific |
| Uses | • Caps • Closures • Household Goods • Toys |
| Appearance | • Natural Color |
| Form(s) | • Pellets |
| Processing Method | • Compounding • Injection Molding |
| Revision Date | • 10/01/2018 |

| 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/cm ³ | 0.900 g/cm ³ | ASTM D1505 |

| Mechanical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Tensile Strength at Yield 2.0 in/min (51 mm/min) | 4900 psi | 33.8 MPa | ASTM D638 |
| Tensile Stress at Yield | 4630 psi | 31.9 MPa | ISO 527-2/50 |
| Elongation at Yield (2.0 in/min (51 mm/min)) | 9.9 % | 9.9 % | ASTM D638 |
| Tensile Strain at Yield | 9.9 % | 9.9 % | ISO 527-2/50 |
| Tensile Modulus - Chord | 212000 psi | 1460 MPa | ISO 527-2/1 |
| Flexural Modulus - 1% Secant 0.051 in/min (1.3 mm/min) | 194000 psi | 1340 MPa | ASTM D790A |
| 0.51 in/min (13 mm/min) | 228000 psi | 1570 MPa | ASTM D790B |
| Flexural Modulus (0.079 in/min (2.0 mm/min)) | 197000 psi | 1360 MPa | ISO 178 |

| Impact | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|---------------------------|-----------------------|---------------|
| Notched Izod Impact (73°F (23°C)) | 0.51 ft·lb/in | 27 J/m | ASTM D256A |
| Notched Izod Impact Strength (73°F (23°C)) | 1.6 ft·lb/in ² | 3.4 kJ/m ² | ISO 180/1A |
| Charpy Notched Impact Strength (73°F (23°C)) | 1.1 ft·lb/in ² | 2.3 kJ/m ² | ISO 179/1eA |
| Gardner Impact 73°F (23°C), 0.125 in (3.18 mm), Geometry GC | 904 in·lb | 102 J | ASTM D5420 |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Heat Deflection Temperature (1.80 MPa) | 117 °F | 47.4 °C | ISO 75-2/ Af |
| Heat Deflection Temperature (0.45 MPa) | 170 °F | 76.4 °C | ISO 75-2/ Bf |
| Deflection Temperature Under Load (DTUL) at 66psi - Unannealed | 192 °F | 88.9 °C | ASTM D648 |
| DTUL @ 66psi - Annealed | 235 °F | 113 °C | ASTM D648 |

| Hardness | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------|-------------------------|--------------------|---------------|
| Rockwell Hardness | 105 | 105 | ASTM D785 |
| Shore Hardness (15 sec) | 69 | 69 | ISO 868 |

Legal Statement

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

This product is not intended for use in medical applications and should not be used in any such applications.

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.

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