

ExxonMobil™ HDPE HD 6605.70

High Density Polyethylene Copolymer Resin

Product Description

HD 6605.70 is a narrow molecular weight hexene copolymer designed for a wide range of injection molding applications, offering excellent ESCR with good stiffness-toughness balance. Ideally suited for articles requiring rugged physical performance in cold temperature environments.

General

| | |
|---------------------------|--|
| Availability ¹ | <ul style="list-style-type: none"> Latin America North America |
| Additive | <ul style="list-style-type: none"> Anti-gas fading: Yes |
| Applications | <ul style="list-style-type: none"> Automotive Components Industrial Closures Recreational Vehicle - Components Waste Carts |
| Revision Date | <ul style="list-style-type: none"> 03/01/2013 |

| Resin Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|-------------------------|------------------|
| Density | 0.948 g/cm ³ | 0.948 g/cm ³ | ASTM D1505 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 5.0 g/10 min | 5.0 g/10 min | ASTM D1238 (mod) |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Deflection Temperature Under Load (DTUL) at 66psi - Unannealed | 156 °F | 69 °C | ASTM D648 |
| Deflection Temperature Under Load (DTUL) at 264psi - Unannealed | 108 °F | 42 °C | ASTM D648B |
| Peak Melting Temperature | 266 °F | 130 °C | ASTM D3418 |

| Molded Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|---------------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield | 3400 psi | 23 MPa | ASTM D638 |
| Elongation at Break | 1000 % | 1000 % | ExxonMobil Method |
| Flexural Modulus | | | ASTM D790B |
| 1% Secant | 160000 psi | 1100 MPa | |
| 2% Secant | 140000 psi | 970 MPa | |
| Environmental Stress-Crack Resistance | | | ASTM D1693B |
| 10% Igepal, F50 | 20 hr | 20 hr | |

| Impact | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------------|-------------------------|--------------------|---------------|
| Notched Izod Impact (-40°F (-40°C)) | 1.0 ft-lb/in | 55 J/m | ASTM D256 |

Additional Information

- Properties are based on compression molded samples.
- Test procedures may be modified to accommodate operating conditions or facility limitations.
- Tensile Strength at Yield and Elongation at Break tested using ASTM D638 Type IV, 50 mm/min.

Legal Statement

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

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

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.

