

ExxonMobil™ HDPE HD 8660 Series

High Density Polyethylene Resin

Product Description

HD 8660 Series are high density hexene copolymers designed to offer superior toughness and stiffness. They are ideally suited for applications that require the optimum balance of low temperature toughness, creep resistance, stiffness, ESCR, and tear properties.

General

| | |
|---------------------------|--|
| Availability ¹ | <ul style="list-style-type: none"> Latin America North America |
| Additive | <ul style="list-style-type: none"> HDP8660.29: Long Term UV-15 Stabilizer: Yes HD 8660.29: Long Term UV-15 Stabilizer: Yes |
| Applications | <ul style="list-style-type: none"> Industrial Products Intermediate Bulk Containers Large Agricultural Tanks |
| Revision Date | <ul style="list-style-type: none"> 09/01/2014 |

| Resin Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density | 0.941 g/cm ³ | 0.941 g/cm ³ | ExxonMobil Method |
| Melt Index (190°C/2.16 kg) | 2.0 g/10 min | 2.0 g/10 min | ASTM D1238 |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Deflection Temperature Under Load (DTUL) at 66psi - Unannealed | 135 °F | 57 °C | ASTM D648 |
| Deflection Temperature Under Load (DTUL) at 264psi - Unannealed | 100 °F | 38 °C | ASTM D648 |
| Peak Melting Temperature | 264 °F | 129 °C | ASTM D3418 |

| Molded Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|--------------------|---------------|
| Tensile Strength at Yield 2.0 in/min (50 mm/min) | 2800 psi | 19 MPa | ASTM D638 |
| Elongation at Yield (2.0 in/min (50 mm/min)) | 10 % | 10 % | ASTM D638 |
| Flexural Modulus - 1% Secant | 130000 psi | 900 MPa | ASTM D790B |
| Environmental Stress-Crack Resistance | | | ASTM D1693A |
| 10% Igepal, F50 | 40 hr | 40 hr | |
| 100% Igepal, F50 | 560 hr | 560 hr | |

| Impact | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------------|-------------------------|--------------------|---------------|
| Impact Strength | | | ARM |
| -40°F (-40°C), 0.125 in (3.18 mm) | 68 ft-lb | 92 J | |
| 0.250 in (6.35 mm) | 190 ft-lb | 258 J | |

Additional Information

- All physical properties were measured on 3 mm. rotomolded samples unless a different value is shown, except for ESCR, which was measured on compression molded samples.
- Tensile testing was conducted at a crosshead speed of 50 mm/min. The tensile strength reported refers to the maximum stress reached during the test.
- Test procedures may be modified to accommodate operating conditions or facility limitations.

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.

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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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