

ExxonMobil™ HDPE HD 6706 Series

High Density Polyethylene Resin

Product Description

HD 6706 is a narrow molecular weight hexene copolymer designed for good processability and excellent balance of ESCR, Toughness, and Stiffness properties. This resin is ideally suited for heavy-duty applications that require robust performance in conditions ranging from ambient to sub-zero temperatures.

General

Availability ¹	▪ Latin America	▪ North America
Additive	▪ HD 6706.17: Antioxidant: Yes	▪ HD 6706.62: Antistatic: Yes
Applications	▪ Industrial Components ▪ Industrial Pails	▪ Lawn & Garden Accessories ▪ Quality Housewares ▪ Structural Foam Articles
Revision Date	▪ 06/22/2015	

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.952 g/cm ³	0.952 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.7 g/10 min	6.7 g/10 min	ASTM D1238 (mod)
Peak Melting Temperature	270 °F	132 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	165 °F	74 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	115 °F	46 °C	ASTM D648B

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield	3800 psi	26 MPa	ASTM D638
Elongation at Break	1300 %	1300 %	ExxonMobil Method
Flexural Modulus			ASTM D790B
1% Secant	190000 psi	1300 MPa	
2% Secant	160000 psi	1100 MPa	
Environmental Stress-Crack Resistance 10% Igepal, F50	4 hr	4 hr	ASTM D1693B

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (-40°F (-40°C))	0.92 ft-lb/in	49 J/m	ASTM D256

Additional Information

- Properties are based on compression molded plaques, ASTM D4703C.
- Tensile Strength at Yield and Elongation at Break tested using ASTM D638 Type IV, 2 in/min.
- Flexural Modulus tested used ASTM D790B, 0.5 in/min.

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.

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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For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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