

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)

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
Peak Melting Temperature	270 °F	132 °C	ASTM D3418

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			ASTM D1693B
10% Igepal, F50	4 hr	4 hr	

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.

ExxonMobil™ HDPE HD 6706 Series
High Density Polyethylene Resin

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

©2022 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in 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, freedom from patent infringement, 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. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Product Solutions" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Product Solutions Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

exxonmobilchemical.com