

Product Datasheet



ExxonMobil™ HDPE HD 6704.18

High Density Polyethylene Copolymer Resin

Product Description

HD 6704 is a narrow molecular weight hexene copolymer designed for outstanding 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	▪ Antioxidant: Yes	
Applications	▪ Industrial Caps & Closures ▪ Industrial Pails	▪ Packaging Drum Lids ▪ Recreational Vehicle - Components
Revision Date	▪ 03/13/2015	

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)	4.5 g/10 min	4.5 g/10 min	ASTM D1238 (mod)

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Deflection Temperature Under Load (DTUL) at 66psi - Unannealed	158 °F	70 °C	ASTM D648
Deflection Temperature Under Load (DTUL) at 264psi - Unannealed	112 °F	44 °C	ASTM D648B
Peak Melting Temperature	271 °F	133 °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	1200 %	1200 %	ExxonMobil Method
Flexural Modulus 1% Secant 2% Secant	190000 psi 170000 psi	1300 MPa 1100 MPa	ASTM D790B
Environmental Stress-Crack Resistance 10% Igepal, F50	6 hr	6 hr	ASTM D1693B

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Notched Izod Impact (-40°F (-40°C))	1.1 ft-lb/in	59 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. (Industrial Pails to Meet UN9)
- 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.

Product Datasheet

ExxonMobil

ExxonMobil™ HDPE HD 6704.18
High Density Polyethylene Copolymer Resin

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

©2024 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