

Product Datasheet



ExxonMobil™ HD 5001

(Legacy name: ExxonMobil™ HDPE HD 7506.08)

High Density Polyethylene

Product Description

ExxonMobil™ HD 5001 resin is a high molecular weight HDPE blown film resin. Films made from HD 5001 exhibit excellent impact and toughness properties, as well as high stiffness. HD 5001 is particularly recommended for films less than 0.5 mil in thickness.

General

Availability ¹	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Additive	<ul style="list-style-type: none"> Antiblock: No 	<ul style="list-style-type: none"> Slip: No 	<ul style="list-style-type: none"> Thermal Stabilizer: Yes
Applications	<ul style="list-style-type: none"> Blown Film Deli Wrap Food Packaging 	<ul style="list-style-type: none"> Grocery Sacks Heavy Duty Bags Institutional Can Liners 	<ul style="list-style-type: none"> Merchandise Bags Produce Bags On A Roll Trash Bags
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 03/23/2023 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.950 g/cm ³	0.950 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	0.060 g/10 min	0.060 g/10 min	ExxonMobil Method
Peak Melting Temperature	266 °F	130 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	5200 psi	36 MPa	ASTM D882
Tensile Strength at Yield TD	4500 psi	31 MPa	ASTM D882
Tensile Strength at Break MD	13000 psi	90 MPa	ASTM D882
Tensile Strength at Break TD	10000 psi	70 MPa	ASTM D882
Elongation at Break MD	330 %	330 %	ASTM D882
Elongation at Break TD	430 %	430 %	ASTM D882
Secant Modulus MD - 1% Secant	150000 psi	1100 MPa	ASTM D882
Secant Modulus TD - 1% Secant	160000 psi	1100 MPa	ASTM D882
Dart Drop Impact ²	280 g	280 g	ASTM D1709A
Elmendorf Tear Strength MD ²	7 g	7 g	ASTM D1922
Elmendorf Tear Strength TD ²	40 g	40 g	ASTM D1922

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.

Processing Statement

Film (0.5 mil/12.7 micron) made on a 1.97 inch (50 mm) blown film line with a 4:1 blow-up ratio, a 7.5:1 stalk to die diameter ratio, a melt temperature of 370°F, (188°C), a 59 mil (1.5mm) die gap at a rate of 10.75 lbs/hr/in die circumference (1.92 kg/hr/cm).

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.

² Normalized to 0.5 mil

Product Datasheet



ExxonMobil™ HD 5001
High Density Polyethylene

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

©2025 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

