

ExxonMobil™ HD 5001

(Legacy name: ExxonMobil™ HDPE HD 7506.08)

High Density Polyethylene

Product Description

ExxonMobil $^{\text{TM}}$ 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	 Africa & Middle East 	 Europe 	 North America
	 Asia Pacific 	 Latin America 	
Additive	 Antiblock: No 	 Slip: No 	 Thermal Stabilizer: Yes
Applications	 Blown Film 	 Grocery Sacks 	 Merchandise Bags
	 Deli Wrap 	 Heavy Duty Bags 	 Produce Bags On A Roll
	 Food Packaging 	 Institutional Can Liners 	 Trash Bags
Form(s)	 Pellets 		
Revision Date	• 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 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.

Effective Date: 03/23/2023 ExxonMobil Page: 1 of 2

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

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For additional technical, sales and order assistance: Contact Us

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