Product Datasheet

ExxonMobil Signature Polymers

Exceed™ HD 6107

High Density Polyethylene

Product Description

Exceed™ HD 6107 is a high density polyethylene resin that can be processed on traditional blown film or cast film lines as well as for making oriented films such as machine direction oriented polyethylene (MDO-PE). Films made from HD 6107 provide excellent stiffness, thermal stability and processability for both oriented and non-oriented film applications.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Additive	▪ Antiblock: No ▪ Slip: No	▪ Processing Aid: No ▪ Thermal Stabilizer: Yes	
Applications	▪ Agricultural Film ▪ Blown Film ▪ Cast Film ▪ Cast Stretch Film ▪ Food Packaging	▪ Form Fill And Seal Packaging ▪ Heavy Duty Bags ▪ Lamination Film ▪ Multilayer Packaging Film ▪ Oriented Films	▪ Shrink Film ▪ Stand Up Pouches ▪ Stretch Film
Form(s)	▪ Pellets		
Revision Date	▪ 07/18/2022		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.961	g/cm³	0.961	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.65	g/10 min	0.65	g/10 min	ASTM D1238
Peak Melting Temperature	274	°F	135	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	5000	psi	35	MPa	ASTM D882
Tensile Strength at Yield TD	3100	psi	22	MPa	ASTM D882
Tensile Strength at Break MD	11000	psi	70	MPa	ASTM D882
Tensile Strength at Break TD	5100	psi	35	MPa	ASTM D882
Elongation at Break MD	460	%	460	%	ASTM D882
Elongation at Break TD	5	%	5	%	ASTM D882
Secant Modulus MD - 1% Secant	170000	psi	1200	MPa	ASTM D882
Secant Modulus TD - 1% Secant	240000	psi	1700	MPa	ASTM D882
Dart Drop Impact	< 70	g	< 70	g	ASTM D1709A
Elmendorf Tear Strength MD	8	g	8	g	ASTM D1922
Elmendorf Tear Strength TD	840	g	840	g	ASTM D1922
Puncture Force	7	lbf	31	N	ExxonMobil Method
Puncture Energy	3.1	in·lb	0.35	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	9		9		ASTM D2457
Haze	> 30	%	> 30	%	ASTM D1003

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.

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

Manufacturer website: https://www.exxonmobilchemical.com/en/products/polyethylene

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Processing Statement

Film (1.0mil/25.4 micron) made on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 410-430°F (210-221°C) ,a 60 mil (1.5 mm) die gap at a rate of 15lbs/hr/in die circumference (2.68 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.

For additional technical, sales and order assistance: Contact Us

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