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

Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ HD 6307

High Density Polyethylene

Product Description

ExxonMobil™ HD 6307 is a medium molecular weight distribution high density polyethylene homopolymer. It possesses excellent processing uniformity and produces bottles with excellent appearance and rigidity. ExxonMobil™ HD 6307 offers the maximum in barrier properties available in high density polyethylene, and imparts minimum odor and taste to the packagedproduct.

General

Availability [1]	▪ Africa & Middle East ▪ Europe	▪ Latin America ▪ North America
Additive	▪ Thermal Stabilizer: Yes	▪ Antistatic: No
Applications	▪ Food Packaging	▪ Liquid Food Containers for Milk, Water and Juices ▪ Thermoformed Parts
Form(s)	▪ Pellets	
Revision Date	▪ 08/21/2020	

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.963	g/cm³	0.963	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.73	g/10 min	0.73	g/10 min	ASTM D1238

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	264	°F	129	°C	ASTM D1525
Peak Melting Temperature	273	°F	134	°C	ExxonMobil Method
Crystallization Peak, Tc	246	°F	119	°C	ExxonMobil Method

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield	4700	psi	32	MPa	ASTM D638
Tensile Strength at Break					ASTM D638
2.0 in/min (50 mm/min)	2200	psi	15	MPa	
Elongation at Yield	8	%	8	%	ASTM D638
Flexural Modulus					
1% Secant : 0.051 in/min (1.3 mm/min)	190000	psi	1300	MPa	ASTM D790A
2% Secant	160000	psi	1100	MPa	ASTM D790
Environmental Stress-Crack Resistance					ASTM D1693B
100% Igepal	8	hr	8	hr	
Durometer Hardness (Shore D, 15 sec)	64		64		ASTM D2240

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Charpy Notched Impact Strength					ISO 179/1eA
-4°F (-20°C)	3.3	ft·lb/in²	7.0	kJ/m²	
73°F (23°C)	4.8	ft·lb/in²	10	kJ/m²	

Additional Information

ExxonMobil™ HD 6307 is NSF® -51 Certified and UL recognized.

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).

Processing Statement

All molded properties were measured on compression molded plaques.

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.

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For additional technical, sales and order assistance: Contact Us

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