Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ C6LL 4342.48

C6 Linear Low Density Polyethylene

Product Description

ExxonMobil™ C6LL 4342.48 resin is an ethylene 1-hexene medium density cast film grade for applications requiring high strength and high stiffness. Films produced from this resin exhibit good tensile and puncture resistance properties.

General

Availability [1]	▪ Latin America	▪ North America
Additive	▪ Antiblock: No ▪ Slip: No	▪ Processing Aid: No ▪ Thermal Stabilizer: Yes
Applications	▪ Agricultural Film ▪ Cast Film	▪ Diaper Backsheet ▪ Overwrap Film
Form(s)	▪ Pellets	
Revision Date	▪ 06/11/2020	

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.942	g/cm³	0.942	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	4.3	g/10 min	4.3	g/10 min	ASTM D1238
Peak Melting Temperature	261	°F	127	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	246	°F	119	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	2400	psi	17	MPa	ASTM D882
Tensile Strength at Yield TD	2500	psi	17	MPa	ASTM D882
Tensile Strength at Break MD	5600	psi	39	MPa	ASTM D882
Tensile Strength at Break TD	4300	psi	30	MPa	ASTM D882
Elongation at Break MD	600	%	600	%	ASTM D882
Elongation at Break TD	810	%	810	%	ASTM D882
Secant Modulus MD - 1% Secant	62000	psi	430	MPa	ASTM D882
Secant Modulus TD - 1% Secant	73000	psi	500	MPa	ASTM D882
Dart Drop Impact	< 50	g	< 50	g	ASTM D1709A
Elmendorf Tear Strength MD	20	g	20	g	ASTM D1922
Elmendorf Tear Strength TD	110	g	110	g	ASTM D1922
Puncture Force	4	lbf	16	N	ExxonMobil Method
Puncture Energy	2.4	in·lb	0.27	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	83		83		ASTM D2457
Haze	3.8	%	3.8	%	ASTM D1003

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

Film (0.8 mil / 20 micron) made from ExxonMobil™ C6LL 4342.48 resin on a 3.5 inch cast film line with a 8.25 inch melt curtain, 80°F (27°C) chill roll temperature at a 340 ft/min (104 m/min) take-off speed and a melt temperature of 530°F (277°C).

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

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