Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ C6LL 2042.48 Blown

C6 Linear Low Density Polyethylene

Product Description

ExxonMobil™ C6LL 2042.48 is an ethylene 1-hexene medium density polyethylene blown film resin for applications requiring high stiffness.It can also be used in cast films. 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 ▪ Blown 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)	2.0	g/10 min	2.0	g/10 min	ASTM D1238
Peak Melting Temperature	264	°F	129	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	248	°F	120	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	2800	psi	19	MPa	ASTM D882
Tensile Strength at Yield TD	3500	psi	24	MPa	ASTM D882
Tensile Strength at Break MD	6400	psi	44	MPa	ASTM D882
Tensile Strength at Break TD	5900	psi	41	MPa	ASTM D882
Elongation at Break MD	760	%	760	%	ASTM D882
Elongation at Break TD	990	%	990	%	ASTM D882
Secant Modulus MD - 1% Secant	78000	psi	540	MPa	ASTM D882
Secant Modulus TD - 1% Secant	100000	psi	710	MPa	ASTM D882
Dart Drop Impact	< 60	g	< 60	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	5	lbf	22	N	ExxonMobil Method
Puncture Energy	3.7	in·lb	0.42	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	29		29		ASTM D2457
Haze	22	%	22	%	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.

Processing Statement

Film (1.0 mil/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 395-415°F (202-213°C), a 60 mil (1.52 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

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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