ExxonMobil Signature Polymers

ExxonMobil™ C4LL 0822.31

(Legacy name: ExxonMobil™ LDPE LL 1107X31)

C4 Linear Low Density Polyethylene

Product Description

ExxonMobil™ C4LL 0822 resins are fractional melt index ethylene 1-butene linear low density polyethylene blown film resins. Films made from ExxonMobil™ C4LL 0822 resins have good stiffness and tensile strength. These resins' strength and drawability make them excellent for many film applications.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No ▪ Slip: No	▪ Processing Aid: No ▪ Thermal Stabilizer: Yes	
Applications	▪ Blown Film	▪ Garment Film	▪ Produce Bags
Form(s)	▪ Pellets		
Revision Date	▪ 02/21/2024		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.922	g/cm³	0.922	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.80	g/10 min	0.80	g/10 min	ASTM D1238
Peak Melting Temperature	253	°F	123	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	219	°F	104	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1500	psi	10	MPa	ASTM D882
Tensile Strength at Yield TD	1600	psi	11	MPa	ASTM D882
Tensile Strength at Break MD	8000	psi	50	MPa	ASTM D882
Tensile Strength at Break TD	5000	psi	34	MPa	ASTM D882
Elongation at Break MD	540	%	540	%	ASTM D882
Elongation at Break TD	820	%	820	%	ASTM D882
Secant Modulus MD - 1% Secant	34000	psi	230	MPa	ASTM D882
Secant Modulus TD - 1% Secant	39000	psi	270	MPa	ASTM D882
Dart Drop Impact	70	g	70	g	ASTM D1709A
Elmendorf Tear Strength MD	50	g	50	g	ASTM D1922
Elmendorf Tear Strength TD	620	g	620	g	ASTM D1922
Puncture Force	8	lbf	34	N	ExxonMobil Method
Puncture Energy	15	in·lb	1.7	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	34		34		ASTM D2457
Haze	17	%	17	%	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).

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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: www.exxonmobilchemical.com/ContactUs

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