Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ C6LL 0825 Series

C6 Linear Low Density Polyethylene

Product Description

ExxonMobil™ C6LL 0825 resins are ethylene 1-hexene linear low density polyethylene film resins. Films made from ExxonMobil™ C6LL 0825 resins have outstanding tensile, stiffness and toughness properties. These superior properties, along with good drawdown capability, permit usage in many demanding packaging applications. Fluoropolymers, of fluorine-containing compounds, and TNPP are not intentionally added.

General

Availability [1]	▪ Latin America	▪ North America
Additive	▪ ExxonMobil™ C6LL 0825.17: Antiblock: 4250 ppm; Slip: Yes; Thermal Stabilizer: Yes; Alternative Processing Aid: Yes ▪ ExxonMobil™ C6LL 0825.70: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes	
Applications	▪ Freezer Film ▪ Grocery Sacks	▪ Heavy Duty Bags ▪ Merchandise Bags
Form(s)	▪ Pellets	
Revision Date	▪ 10/15/2024	

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.925	g/cm³	0.925	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.80	g/10 min	0.80	g/10 min	ASTM D1238
Peak Melting Temperature	257	°F	125	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	226	°F	108	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1700	psi	12	MPa	ASTM D882
Tensile Strength at Yield TD	1900	psi	13	MPa	ASTM D882
Tensile Strength at Break MD	8300	psi	60	MPa	ASTM D882
Tensile Strength at Break TD	6700	psi	46	MPa	ASTM D882
Elongation at Break MD	530	%	530	%	ASTM D882
Elongation at Break TD	790	%	790	%	ASTM D882
Secant Modulus MD - 1% Secant	38000	psi	260	MPa	ASTM D882
Secant Modulus TD - 1% Secant	46000	psi	320	MPa	ASTM D882
Dart Drop Impact	130	g	130	g	ASTM D1709A
Elmendorf Tear Strength MD	220	g	220	g	ASTM D1922
Elmendorf Tear Strength TD	670	g	670	g	ASTM D1922
Puncture Force	11	lbf	47	N	ExxonMobil Method
Puncture Energy	33	in·lb	3.7	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	58		58		ASTM D2457
Haze	14	%	14	%	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.

Fluoropolymers, or fluorine-containing compounds, and tris(nonylphenol) phosphite (TNPP) CAS# 26523-78-4 are not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for their presence, based on product composition knowledge these substances are not expected to be present. However, the fact that these substances are not intentionally used by ExxonMobil in this product does not exclude that trace levels of these substances 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 (1.0 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).

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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