Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ C6LL 3218 Series

C6 Linear Low Density Polyethylene

Product Description

ExxonMobil™ C6LL 3218 Series are ethylene 1-hexene copolymer linear low density polyethylene cast film resins. Films made from ExxonMobil™ C6LL 3218 resins have outstanding tensile properties, as well as stiffness and toughness.These superior properties, along with excellent drawability, make ExxonMobil™ C6LL 3218 versatile packaging film resins.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ ExxonMobil™ C6LL 3218.39: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes ▪ ExxonMobil™ C6LL 3218.32: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes		
Applications	▪ Cast Film	▪ Cast Stretch Film	▪ Packaging Films
Form(s)	▪ Pellets		
Revision Date	▪ 06/11/2020		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density / Specific Gravity	0.918	g/cm³	0.918	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	3.2	g/10 min	3.2	g/10 min	ASTM D1238
Peak Melting Temperature	255	°F	124	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	199	°F	93.0	°C	ExxonMobil Method

Film Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Strength at Yield MD	1300	psi	8.7	MPa	ASTM D882
Tensile Strength at Yield TD	1200	psi	8.2	MPa	ASTM D882
Tensile Strength at Break MD	6900	psi	47	MPa	ASTM D882
Tensile Strength at Break TD	4700	psi	33	MPa	ASTM D882
Elongation at Break MD	510	%	510	%	ASTM D882
Elongation at Break TD	820	%	820	%	ASTM D882
Secant Modulus MD - 1% Secant	19000	psi	130	MPa	ASTM D882
Secant Modulus TD - 1% Secant	21000	psi	150	MPa	ASTM D882
Dart Drop Impact	100	g	100	g	ASTM D1709A
Elmendorf Tear Strength MD	170	g	170	g	ASTM D1922
Elmendorf Tear Strength TD	580	g	580	g	ASTM D1922
Puncture Force	7	lbf	32	N	ExxonMobil Method
Puncture Energy	23	in·lb	2.6	J	ExxonMobil Method

Optical Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Gloss (45°)	91		91		ASTM D2457
Haze	2.0	%	2.0	%	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 (0.8 mil / 20 micron) made from ExxonMobil™ C6LL 3218.32 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 400 ft/min (122 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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