Product Datasheet

ExxonMobil Signature Polymers

Exceed™ Tough m 3812.CB Cast

Metallocene Polyethylene

Product Description

Exceed™ Tough m 3812.CB is an ethylene 1-hexene copolymer. Films made from Exceed™ Tough m 3812.CB have outstanding toughness, impact strength, and puncture. These superior strength properties make this a very versatile packaging film resin and ideally suited for stretch film. It can also be used to enhance the sealing caulkability of lower melt index materials.

General

Availability [1]	▪ Africa & Middle East ▪ Asia Pacific	▪ Europe ▪ Latin America	▪ North America
Additive	▪ Exceed™ Tough m 3812.CB: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes		
Applications	▪ Cast Film ▪ Cast Stretch Film ▪ Extrusion Coating	▪ Food Packaging ▪ Form Fill And Seal Packaging ▪ Hygiene film	▪ Packaging Films
Revision Date	▪ 02/23/2018		

Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density / Specific Gravity	0.912	g/cm³	0.912	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	3.8	g/10 min	3.8	g/10 min	ASTM D1238
Peak Melting Temperature	230	°F	110	°C	ExxonMobil Method

Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	780	psi	5.3	MPa	ASTM D882
Tensile Strength at Yield TD	650	psi	4.5	MPa	ASTM D882
Tensile Strength at Break MD	6900	psi	48	MPa	ASTM D882
Tensile Strength at Break TD	6300	psi	44	MPa	ASTM D882
Elongation at Break MD	450	%	450	%	ASTM D882
Elongation at Break TD	610	%	610	%	ASTM D882
Secant Modulus MD - 1% Secant	13000	psi	87	MPa	ASTM D882
Secant Modulus TD - 1% Secant	14000	psi	97	MPa	ASTM D882
Dart Drop Impact [2]	610	g	610	g	ASTM D1709A
Elmendorf Tear Strength MD	250	g	250	g	ASTM D1922
Elmendorf Tear Strength TD	440	g	440	g	ASTM D1922

Optical Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Gloss (45°)	86		86		ASTM D2457
Haze	2.7	%	2.7	%	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 Exceed 3812CB on a Black Clawson cast line at a 5.5 inch (14 cm) melt curtain length, 520-540 °F (275-310 °C) melt temperature, 80 °F (27 °C) chill roll temperature, and 770 fpm (235 mpm) line speed.

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.

[2] Dart Head Type C

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

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For additional technical, sales and order assistance: Contact Us

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