

Product Datasheet



Optema™ TC 111 Cast

Ethylene Methyl Acrylate Copolymer Resin

Product Description

Optema™ TC 111 is an ethylene methyl acrylate copolymer specifically formulated to offer extrusion and property performance for blown and cast film applications. It produces a soft, elastic film. Optema™ TC 111 can produce film under 1.0 mil thickness.

General

Availability ¹	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Disposable Gloves	▪ Hospital Drapes	▪ Upholstery Film
Revision Date	▪ 01/22/2019		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.943 g/cm ³	0.943 g/cm ³	ASTM D1505
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Methyl Acrylate Content	21.5 wt%	21.5 wt%	ExxonMobil Method
Peak Melting Temperature	176 °F	80 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	124 °F	51 °C	ASTM D1525

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Break MD	3900 psi	27 MPa	ASTM D882
Tensile Strength at Break TD	2500 psi	17 MPa	ASTM D882
Elongation at Break MD	260 %	260 %	ASTM D882
Elongation at Break TD	780 %	780 %	ASTM D882
Secant Modulus MD	8000 psi	55 MPa	ASTM D882
Secant Modulus TD	6600 psi	45 MPa	ASTM D882
Dart Drop Impact	180 g	180 g	ASTM D1709A
Elmendorf Tear Strength MD	30 g	30 g	ASTM D1922
Elmendorf Tear Strength TD	410 g	410 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	32	32	ASTM D2457
Haze	19 %	19 %	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 (2 mil / 50.8 micron) made on a 3.5 inch cast film line with a 5 inch melt curtain, 80°F (27°C) chill roll temperature at a 250 ft/min take-off speed and melt temperature of 390-450°F (199-232°C).

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.

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ExxonMobil**Optema™ TC 111 Cast**
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