

# Optema™ TC 114 Cast

## Ethylene Methyl Acrylate Copolymer Resin

### Product Description

Optema TC 114 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 with good handling characteristics without additional additives. Optema TC 114 can produce film under 1.0 mil thickness.

### General

Availability <sup>1</sup>	▪ Latin America	▪ North America	
Additive	▪ Antiblock: 14000 ppm	▪ Slip: 3000 ppm	▪ Thermal Stabilizer: Yes
Applications	▪ Disposable Gloves	▪ Hospital Drapes	▪ Upholstery Film
Revision Date	▪ 01/01/2017		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.947 g/cm <sup>3</sup>	0.947 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/2.16 kg)	3.2 g/10 min	3.2 g/10 min	ASTM D1238
Methyl Acrylate Content	18.0 wt%	18.0 wt%	ExxonMobil Method
Peak Melting Temperature	186 °F	86 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	134 °F	57 °C	ASTM D1525

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Break MD	3200 psi	22 MPa	ASTM D882
Tensile Strength at Break TD	2500 psi	17 MPa	ASTM D882
Elongation at Break MD	240 %	240 %	ASTM D882
Elongation at Break TD	770 %	770 %	ASTM D882
Secant Modulus MD	9400 psi	65 MPa	ASTM D882
Secant Modulus TD	9100 psi	63 MPa	ASTM D882
Dart Drop Impact	180 g	180 g	ASTM D1709A
Elmendorf Tear Strength MD	60 g	60 g	ASTM D1922
Elmendorf Tear Strength TD	340 g	340 g	ASTM D1922

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	43	43	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 from Optema TC 114 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.

<sup>1</sup> Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

Optema™ TC 114 Cast  
Ethylene Methyl Acrylate Copolymer Resin

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

©2020 ExxonMobil. ExxonMobil, the ExxonMobil logo, the interlocking "X" device and other product or service names used herein are trademarks of ExxonMobil, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without ExxonMobil's prior written authorization. To the extent ExxonMobil authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to or reproduce it in whole or in part on a website. ExxonMobil does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, suitability, accuracy, reliability, or completeness of this information or the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of or related to anyone using or relying on any of the information in this document. This document is not an endorsement of any non-ExxonMobil product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "ExxonMobil Chemical" and "ExxonMobil" are each used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliate either directly or indirectly stewarded.

[exxonmobilchemical.com](http://exxonmobilchemical.com)