

# Optema™ TC 221 ExCo

## Ethylene Methyl Acrylate Copolymer Resin

### Product Description

Optema™ TC 221 is an ethylene methyl acrylate copolymer that can be used for making alloys, blends and compounds. It can also be injection molded where softness and flexibility are required. It is an excellent grade for coextrusion coating and extrusion lamination where good interlayer adhesion between polyethylene, polypropylene, nylon, PVdC, or other substrates is required.

### General

Availability <sup>1</sup>	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Coextrusion Coating ▪ Demanding Heat Seals ▪ Extrusion Coating	▪ Extrusion Lamination ▪ Food Packaging ▪ Industrial Packaging	▪ Low Neck In, Low Line Speed Coatings ▪ Masterbatch Base Resin ▪ Thermal Lamination
Revision Date	▪ 01/22/2019		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.944 g/cm <sup>3</sup>	0.944 g/cm <sup>3</sup>	ASTM D1505
Melt Index (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Methyl Acrylate Content	24.0 wt%	24.0 wt%	ExxonMobil Method
Peak Melting Temperature	164 °F	73 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	114 °F	45 °C	ASTM D1525

Coating Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Neck-in			ExxonMobil Method
328 ft/min (100 m/min), Constant output at 35 rpm, 563°F (295°C)	5.5 in	14 cm	
656 ft/min (200 m/min), Constant output at 35 rpm, 563°F (295°C)	4.2 in	11 cm	

### 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

Typical values obtained on a pilot coextrusion coating line at ExxonMobil Europe Technical Center at an air gap of 170 mm (6.69 in). Excellent results are obtained in extrusion coating at 260°C to 300°C (500°F - 572°F) temperature range. Processing temperatures above 320°C (608°F) are not recommended. Optema™ EMA resin can be processed on conventional extrusion equipment designed for extrusion coating LDPE. The broad thermal stability range offers a wide processing conditions window. Water cooling of extruder throat is preferred to avoid hopper bridging.

### 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 221 ExCo  
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)