

# Optema™ TC 221 Molding

## Ethylene Methyl Acrylate Copolymer Resin

### Product Description

Optema™ TC 221 is an ethylene methyl acrylate copolymer that can be used in specialty bonding applications and as a toughener for engineering polymers. It can be processed at temperatures as low as 200°F (93°C) and as high as 600°F (315°C).

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Latin America</li> <li>North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Slip: No</li> <li>Thermal Stabilizer: Yes</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Compatibilizer</li> <li>Engineering Polymer Toughener</li> <li>Low Temperature Sealant Compounds</li> <li>Masterbatch Base Resin</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>01/22/2019</li> </ul>

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	163 °F	73 °C	ExxonMobil Method

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Vicat Softening Temperature	113 °F	45 °C	ASTM D1525

Molded Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Break	970 psi	6.7 MPa	ASTM D638
Elongation at Break	> 600 %	> 600 %	ASTM D638
Flexural Modulus - 1% Secant	3900 psi	27 MPa	ASTM D790
Durometer Hardness			ASTM D2240
Shore A, 15 sec	82	82	
Shore D, 15 sec	24	24	

Impact	Typical Value (English)	Typical Value (SI)	Test Based On
Instrumented Dart Impact			ASTM D3763
-40°F (-40°C)	17 ft·lb	23 J	
73°F (23°C)	13 ft·lb	18 J	

### 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

The test specimens were prepared using ASTM D4703, Procedure 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.

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

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