

# Exceed™ Tough + m 1415.MO

## Metallocene Polyethylene

### Product Description

Exceed™ Tough+ m1415.MO is an ethylene 1-hexene copolymer that offers step-out toughness and easy processing for a diverse range of film applications. The combination of high toughness, easy processing and excellent sealing performance make this a very versatile packaging film resin. Exceed™ Tough+ m1415.MO is TNPP-free.

### General

Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> </ul>	<ul style="list-style-type: none"> <li>Europe</li> <li>Latin America</li> </ul>	<ul style="list-style-type: none"> <li>North America</li> </ul>
Additive	<ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Slip: No</li> </ul>	<ul style="list-style-type: none"> <li>Processing Aid: No</li> <li>Thermal Stabilizer: Yes</li> </ul>	
Applications	<ul style="list-style-type: none"> <li>Agricultural Film</li> </ul>	<ul style="list-style-type: none"> <li>Food Packaging</li> </ul>	
Revision Date	<ul style="list-style-type: none"> <li>12/17/2024</li> </ul>		

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.915 g/cm <sup>3</sup>	0.915 g/cm <sup>3</sup>	ExxonMobil Method
Melt Index	1.4 g/10 min	1.4 g/10 min	ExxonMobil Method
Peak Melting Temperature	248 °F	120 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1300 psi	8.9 MPa	ASTM D882
Tensile Strength at Yield TD	1300 psi	8.9 MPa	ASTM D882
Tensile Strength at Break MD	10000 psi	70 MPa	ASTM D882
Tensile Strength at Break TD	8500 psi	60 MPa	ASTM D882
Elongation at Break MD	450 %	450 %	ASTM D882
Elongation at Break TD	650 %	650 %	ASTM D882
Secant Modulus MD - 1% Secant	25000 psi	170 MPa	ASTM D882
Secant Modulus TD - 1% Secant	27000 psi	190 MPa	ASTM D882
Elmendorf Tear Strength MD	230 g	230 g	ASTM D1922
Elmendorf Tear Strength TD	400 g	400 g	ASTM D1922
Puncture Force	11 lbf	49 N	ExxonMobil Method
Puncture Energy	35 in·lb	4.0 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	19	19	ASTM D2457
Haze	33 %	33 %	ASTM D1003

### Legal Statement

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use. For detailed Product Stewardship information, please contact Customer Service.

Exceed™ Tough+ m1415.MO can -in principle- be used in food contact applications in all EU Member States and in the USA (FDA). Migration or use limitations may apply. Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific grade of interest.

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

### Processing Statement

Films made with Exceed™ Tough+ m1415.MO resin on a 90mm blown film line with a 2.5:1 blow-up ratio, a melt temperature of 415-430°F (213-221°C), a 90 mil (2.29 mm) die gap and having an average thickness of around 1 mil.

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### 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.

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

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