

Enable™ 4002RA

Performance Polymer

Product Description

Enable™ 4002RA is a medium density ethylene 1-hexene copolymer. Enable 4002RA performance polymer provides blown film with high stiffness and shrink along with good optical properties. Excellent bubble stability leads to high output capability in monolayer and coextruded films. TnPP is not intentionally added to Enable™ 4002RA.

General

Availability ¹	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Additive	<ul style="list-style-type: none"> Antiblock: No Slip: No 	<ul style="list-style-type: none"> Thermal Stabilizer: Yes Alternative Processing Aid: Yes 	
Applications	<ul style="list-style-type: none"> Collation Shrink Compression Packaging 	<ul style="list-style-type: none"> Lamination Film Multilayer Packaging Film 	
Form(s)	<ul style="list-style-type: none"> Pellets 		
Revision Date	<ul style="list-style-type: none"> 03/17/2023 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.938 g/cm ³	0.938 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.25 g/10 min	0.25 g/10 min	ASTM D1238
Peak Melting Temperature	262 °F	128 °C	ExxonMobil Method

Film Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	2800 psi	19 MPa	ASTM D882
Tensile Strength at Yield TD	3500 psi	24 MPa	ASTM D882
Tensile Strength at Break MD	9700 psi	70 MPa	ASTM D882
Tensile Strength at Break TD	7000 psi	49 MPa	ASTM D882
Elongation at Break MD	490 %	490 %	ASTM D882
Elongation at Break TD	810 %	810 %	ASTM D882
Secant Modulus MD - 1% Secant	78000 psi	540 MPa	ASTM D882
Secant Modulus TD - 1% Secant	110000 psi	730 MPa	ASTM D882
Dart Drop Impact	60 g	60 g	ASTM D1709
Elmendorf Tear Strength MD	10 g	10 g	ASTM D1922
Elmendorf Tear Strength TD	600 g	600 g	ASTM D1922
Puncture Force	11 lbf	50 N	ExxonMobil Method
Puncture Energy	19 in-lb	2.2 J	ExxonMobil Method

Optical Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	26	26	ASTM D2457
Haze	21 %	21 %	ASTM D1003

Legal Statement

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.

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 (1 mil/25.4 micron) made on a 2.5 inch blown film line equipped with 2.5:1 blow-up ratio, 30 mil die gap, 16 in frostline, 425°F melt temperature and 10 lbs/die in/hr.

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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.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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