

Eraclene® FA 506

High Density Polyethylene

Versalis S.p.A.

Technical Data

Product Description

Eraclene® FA 506 is a high density polyethylene resin (MDPE), hexene copolymer, with antioxidants, suitable for blown film extrusion. Its broad molecular weight distribution and density successfully combine excellent performance at high extrusion rates with high film strength and sealability.

Eraclene® FA 506 can be processed either in blend and in coextrusion. It is possible to use it pure for high rigidity grocery sacks and shopping bags. Usage in blend and/or in coextrusion with LDPE and LLDPE is also recommended for high strength thermo-shrinkable film, as well as for hygienic packaging. The excellent balance between drawability and bubble stability makes Eraclene® FA 506 the optimum choice for manufacturing of high quality thin film characterized by outstanding mechanical properties.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• Europe	• North America	
Additive	• Antioxidant		
Features	• Antioxidant • Copolymer • Food Contact Acceptable	• Good Drawdown • Good Heat Seal • Hexene Comonomer	• High Strength • Med.-Wide Molecular Weight Distrib.
Uses	• Bags • Blending	• Film • Packaging	• Shrink Wrap
Agency Ratings	• EU Food Contact, Unspecified Rating		
Forms	• Pellets		
Processing Method	• Blown Film	• Coextrusion	• Film Extrusion

Physical	Nominal Value Unit	Test Method
Density	0.939 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)		ISO 1133
190°C/21.6 kg	15 g/10 min	
190°C/5.0 kg	0.60 g/10 min	

Films	Nominal Value Unit	Test Method
Film Thickness - Tested	25 µm	
Film Thickness - Recommended / Available	10 to 50µm	
Tensile Modulus		ISO 527-3
1% Secant, MD: 25 µm, Blown Film	400 MPa	
1% Secant, TD: 25 µm, Blown Film	500 MPa	
Tensile Stress		ISO 527-3
MD: Break, 25 µm, Blown Film	55.0 MPa	
TD: Break, 25 µm, Blown Film	50.0 MPa	
Tensile Elongation		ISO 527-3
MD: Break, 25 µm, Blown Film	550 %	
TD: Break, 25 µm, Blown Film	750 %	
Dart Drop Impact ³ (25 µm, Blown Film)	150 g	ISO 7765-1
Elmendorf Tear Strength ⁴		ISO 6383-2
MD: 25.0 µm	25.0 kN/m	
TD: 25.0 µm	250.0 kN/m	

Thermal	Nominal Value Unit	Test Method
Brittleness Temperature	< -60.0 °C	ASTM D746
Vicat Softening Temperature	119 °C	ISO 306/A
Melting Temperature	129 °C	Internal Method

Extrusion	Nominal Value Unit
Melt Temperature	190 to 210 °C