

Enable™ 23-05 Series

Metallocene Polyethylene Resin

Product Description

ENABLE 23-05 resins are metallocene ethylene-hexene copolymers. Enable mPE resins offer an outstanding balance between processing and film properties, including tensile, impact and puncture. Easier processing and excellent properties lead to significant high pressure LDPE replacement in many applications, yet with superior drawdown and enhanced toughness. Enable 23-05 resins are available with and without antiblock.

General

Additive	- Enable 23-05HH: Antiblock: No; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes - Enable 23-05NA: Antiblock: 2000 ppm; Slip: No; Processing Aid: Yes; Thermal Stabilizer: Yes		
Applications	- Agricultural Film - Blown Film - Collation Shrink - Food packaging	- Form Fill And Seal Packaging - Heavy Duty Bags - Lamination Film - Multilayer Packaging Film	- Shrink Film - Stand Up Pouches

Resin Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.923 g/cm ³	0.923 g/cm ³	ExxonMobil Method
Melt Index (190°C/2.16 kg)	0.50 g/10 min	0.50 g/10 min	ASTM D1238
Peak Melting Temperature	241 °F	116 °C	ExxonMobil Method

Film Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Strength at Yield MD	1600 psi	11 MPa	ASTM D882
Tensile Strength at Yield TD	1700 psi	12 MPa	ASTM D882
Tensile Strength at Break MD	8900 psi	60 MPa	ASTM D882
Tensile Strength at Break TD	7700 psi	50 MPa	ASTM D882
Elongation at Break MD	480 %	480 %	ASTM D882
Elongation at Break TD	730 %	730 %	ASTM D882
Secant Modulus MD - 1% Secant	35000 psi	240 MPa	ASTM D882
Secant Modulus TD - 1% Secant	41000 psi	290 MPa	ASTM D882
Dart Drop Impact	180 g	180 g	ASTM D1709A
Elmendorf Tear Strength MD	60 g	60 g	ASTM D1922
Elmendorf Tear Strength TD	630 g	630 g	ASTM D1922
Puncture Force	11 lbf	48 N	ExxonMobil Method
Puncture Energy	27 in-lb	3.1 J	ExxonMobil Method

Optical Properties	Typical Value (English)	Typical Value (SI)	Test Based On
Gloss (45°)	51	51	ASTM D2457
Haze	9.5 %	9.5 %	ASTM D1003

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

Film (1 mil / 25.4 micron) made from Enable 23-05HH on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 402 °F (206 °C), a 30 mil (0.76 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).