ExxonMobil Signature Polymers

ExxonMobil™ HD 5805

(Legacy name: ExxonMobil™ HD 5805)

High Density Polyethylene

Product Description

ExxonMobil™ HD 5805 is a high density polyethylene resin that can be processed on high stalk, pocket extrusion or cast lines. Films made from HD 5805 resin exhibit an excellent stiffness balance. High thermal stability provides excellent film appearance and high quality recycle. HD 5805 resin is particularly recommended as a blend component with LLDPE for stiff clear films.

General

Availability [1]	▪ Latin America	▪ North America	
Additive	▪ Antiblock: No	▪ Slip: No	▪ Thermal Stabilizer: Yes
Applications	▪ Blown Film ▪ Deli Wrap ▪ Food Packaging	▪ Heavy Duty Bags ▪ Oriented Film Products ▪ Overwrap Film	▪ Surface Protection Film
Form(s)	▪ Pellets		
Revision Date	▪ 04/01/2019		

Resin Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Density	0.958	g/cm³	0.958	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	0.45	g/10 min	0.45	g/10 min	ASTM D1238
High Load Melt Index (190°C/21.6 kg)	28	g/10 min	28	g/10 min	ASTM D1238
Peak Melting Temperature	270	°F	132	°C	ExxonMobil Method

Film Properties	Typical Value	(English)	Typical Value	(SI)	Test Based On
Tensile Strength at Yield MD	4800	psi	33	MPa	ASTM D882
Tensile Strength at Yield TD	5200	psi	36	MPa	ASTM D882
Tensile Strength at Break MD	11000	psi	70	MPa	ASTM D882
Tensile Strength at Break TD	5600	psi	39	MPa	ASTM D882
Elongation at Break MD	400	%	400	%	ASTM D882
Elongation at Break TD	6	%	6	%	ASTM D882
Secant Modulus MD - 1% Secant	150000	psi	1000	MPa	ASTM D882
Secant Modulus TD - 1% Secant	220000	psi	1500	MPa	ASTM D882
Dart Drop Impact	< 60	g	< 60	g	ASTM D1709A
Elmendorf Tear Strength MD	10	g	10	g	ASTM D1922
Elmendorf Tear Strength TD	1200	g	1200	g	ASTM D1922

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 (1.0 mil/25.4 micron) made from HD 5805 resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 405-425°F (207-218°C), a 60 mil (1.5 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

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.

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For additional technical, sales and order assistance: Contact Us

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