Technical Information

DOW™ LDPE 535E
Low Density Polyethylene Resin

Overview

DOW LDPE 535E is a 0.6 melt index, medium density LDPE suitable for shrink film application offering a good balance between shrink performance (hot and cold shrink), optical properties such as high gloss and low haze and mechanical performance.

Main Characteristics:

- LOW Density Polyethylene Resin
- Blown Film Extrusion
- Collation Shrink Film

Complies with:

- U.S. FDA U.S. FDA 177.1520(c) 2.2
- EU, No 10/2011
- Consult the regulations for complete details.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.928	g/cm³	0.928	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.60	g/10 min	0.60	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Coefficient of Friction	0.30 to 0.45		0.30 to 0.45		ASTM D1894
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	2	mil	50	µm	
Secant Modulus					ASTM D882
2% Secant, MD : 2.0 mil (50 µm), Blown Film	30600	psi	211	MPa	
2% Secant, TD : 2.0 mil (50 µm), Blown Film	31800	psi	219	MPa	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (50 µm), Blown Film	1740	psi	12.0	MPa	
TD : Yield, 2.0 mil (50 µm), Blown Film	1890	psi	13.0	MPa	
MD : Break, 2.0 mil (50 µm), Blown Film	3190	psi	22.0	MPa	
TD : Break, 2.0 mil (50 µm), Blown Film	2900	psi	20.0	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (50 µm), Blown Film	370	%	370	%	
TD : Break, 2.0 mil (50 µm), Blown Film	530	%	530	%	
Dart Drop Impact					ASTM D1709A
2.0 mil (50 µm), Blown Film	120	g	120	g	
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (50 µm), Blown Film	230	g	230	g	
TD : 2.0 mil (50 µm), Blown Film	230	g	230	g	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	219	°F	104	°C	ASTM D1525
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss (45°, 1.97 mil (50.0 µm))	62		62		ASTM D2457
Haze (1.97 mil (50.0 µm))	8.30	%	8.30	%	ASTM D1003

Extrusion Notes

Fabrication Conditions For Blown Film:

- Blow-Up Ratio: 1 to 2.5