DOW™ LDPE 545E
Low Density Polyethylene Resin

Overview

DOW LDPE™ 545E is 0.9 melt index, medium density LDPE suitable for collation 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
- Film Extrusion: Blown
- Collation Shrink Film
- Blends with LLDPE

Complies with:

- EU, No 10/2011
- U.S. FDA 177.1520(c)2.2
- 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)	0.90	g/10 min	0.90	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Coefficient of Friction	0.40 to 0.50		0.40 to 0.50		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)	31200	psi	215	MPa	
2% Secant, TD : 2.0 mil (50 µm)	32200	psi	222	MPa	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (50 µm)	1740	psi	12.0	MPa	
TD : Yield, 2.0 mil (50 µm)	1890	psi	13.0	MPa	
MD : Break, 2.0 mil (50 µm)	3050	psi	21.0	MPa	
TD : Break, 2.0 mil (50 µm)	2610	psi	18.0	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (50 µm)	390	%	390	%	
TD : Break, 2.0 mil (50 µm)	510	%	510	%	
Dart Drop Impact (2.0 mil (50 µm))	110	g	110	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (50 µm)	200	g	200	g	
TD : 2.0 mil (50 µm)	240	g	240	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 (20°, 1.97 mil (50.0 µm))	64		64		ASTM D2457
Haze (1.97 mil (50.0 µm))	8.50	%	8.50	%	ASTM D1003

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.