Technical Information

DOW™ LDPE 150E
Low Density Polyethylene Resin

Overview

DOW LDPE™ 150E Low Density Polyethylene Resin can be readily extruded using conventional blown film techniques utilising melt temperatures between 170 and 230°C. DOW LDPE 150E Low Density Polyethylene Resin, when properly fabricated, shows a good combination of processability, stiffness and physical properties.

Note: DOW LDPE 150E Low Density Polyethylene Resin should comply with:

- EU, No 10/2011
- U.S. FDA 21 CFR 177.1520(c)2.2
- U.S. FDA-DMF
- Consult the regulations for complete details

Applications:

- Heavy duty industrial film

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.921	g/cm³	0.921	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.25	g/10 min	0.25	g/10 min	ISO 1133
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	4	mil	100	µm	
Tensile Modulus					ISO 527-3
2% Secant, MD : 3.9 mil (100 µm)	18600	psi	128	MPa	
2% Secant, TD : 3.9 mil (100 µm)	18600	psi	128	MPa	
Tensile Stress					ISO 527-3
MD : Yield, 3.9 mil (100 µm)	1330	psi	9.20	MPa	
TD : Yield, 3.9 mil (100 µm)	1100	psi	7.60	MPa	
MD : Break, 3.9 mil (100 µm)	3050	psi	21.0	MPa	
TD : Break, 3.9 mil (100 µm)	2970	psi	20.5	MPa	
Tensile Elongation					ASTM D882
MD : Break, 3.9 mil (100 µm)	470	%	470	%	
TD : Break, 3.9 mil (100 µm)	530	%	530	%	
Dart Drop Impact (3.9 mil (100 µm))	430	g	430	g	ISO 7765-1/A
Elmendorf Tear Strength					ASTM D1922
MD : 3.9 mil (100 µm)	270	g	270	g	
TD : 3.9 mil (100 µm)	480	g	480	g	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	205	°F	96.0	°C	ASTM D1525

Extrusion Notes
Blow-up ratio 1:2.5

Notes

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

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Manufacturer website: https://www.dow.com/en-us/market/mkt-polyethylene.html

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