

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:

- Europe EU-Directive 2002/72/EC (See NOTES)
- 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/cm ³	0.921 g/cm ³	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	3.9 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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