

Technical Data Sheet

Lupolen 1840D

Low Density Polyethylene



Product Description

Lupolen 1840 D is a non-additivated, low density polyethylene. It is characterized by a high melt strength leading to a good bubble stability during blown film extrusion. It is delivered in pellet form.

This product is not intended for use in medical and pharmaceutical applications.

Application	Agriculture Film; Bags & Pouches; Heavy Duty Packaging; Liner Film; Shrink Film; Stretch Hood
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	General Purpose; Good Processability; Good Tear Strength; Good Toughness

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	0.25	g/10 min	ISO 1133-1
Density	0.919	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	200	MPa	ISO 527-1, -2
Tensile Stress at Yield	9	MPa	ISO 527-1, -2
Film			
Dart Drop Impact Strength, F50	280	g	ASTM D1709
Tensile Strength			
MD	27	MPa	ISO 527-1, -3
TD	25	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	200	%	ISO 527-1, -3
TD	500	%	ISO 527-1, -3
Coefficient of Friction	>0.8		ISO 8295
Impact			
Failure Energy	6.5	J/mm	DIN 53373
Film thickness: 70 µm			
Thermal			
Vicat Softening Temperature, (A/50 N)	93	°C	ISO 306
Peak Melting Point	108	°C	ISO 11357-3
Optical			
Haze, (50 µm)	<15	%	ASTM D1003



Gloss		
(20°)	>10	ASTM D2457
(60°)	>50	ASTM D2457
Additional Information		
Test Specimen	Film	
Film properties tested using 50 μm thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 2.5:1.		
Processing Parameters		
Extrusion Temperature	170-220 °C	

Notes

These are typical property values not to be construed as specification limits.

