

## 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.

#### Regulatory Status

For regulatory compliance information, see *Lupolen 1840D* [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial: Active
<b>Availability</b>	Europe
<b>Application</b>	Agriculture Film; Bags & Pouches; Heavy Duty Packaging; Liner Film; Shrink Film; Stretch Hood
<b>Market</b>	Flexible Packaging
<b>Processing Method</b>	Blown Film
<b>Attribute</b>	General Purpose; Good Processability; Good Tear Strength; Good Toughness

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (190 °C/2.16 kg)	0.25	g/10 min	ISO 1133-1
Density	0.919	g/cm <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
Tensile Modulus	200	MPa	ISO 527-1, -2
Tensile Stress at Yield	9	MPa	ISO 527-1, -2
<b>Film</b>			
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
<b>Impact</b>			
Failure Energy Film thickness: 70 µm	6.5	J/mm	DIN 53373
<b>Thermal</b>			
Vicat Softening Temperature, (A/50 N)	93	°C	ISO 306
Peak Melting Point	108	°C	ISO 11357-3
<b>Optical</b>			
Haze, (50 µm)	<15	%	ASTM D1003

Gloss		
(20°)	>10	ASTM D2457
(60°)	>50	ASTM D2457
<b>Additional Information</b>		
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.		
<b>Processing Parameters</b>		
Extrusion Temperature	170-220 °C	

### Notes

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