

Technical Data Sheet

Lupolen 3020F



Low Density Polyethylene

Product Description

Lupolen 3020 F is a non-additivated, low density polyethylene. It is characterized by a good melt strength leading to a good bubble stability during blown film extrusion.

LyondellBasell customers report that films made from *Lupolen 3020 F* exhibit a good shrinkage performance.

Lupolen 3020 F provides the option to produce films with good optical and mechanical properties.

It is delivered in pellet form.

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

Application	Bags & Pouches; Food Packaging Film; Lamination Film; Shrink Film; Surface Protection Film
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	Good Heat Seal; Good Processability; Superior Optical Properties

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	0.9	g/10 min	ISO 1133-1
Density	0.927	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	300	MPa	ISO 527-1, -2
Tensile Stress at Yield	12	MPa	ISO 527-1, -2
Film			
Dart Drop Impact Strength, F50	120	g	ASTM D1709
Tensile Strength			
MD	27	MPa	ISO 527-1, -3
TD	22	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	300	%	ISO 527-1, -3
TD	600	%	ISO 527-1, -3
Coefficient of Friction	>0.8		ISO 8295
Impact			
Failure Energy	4	J/mm	DIN 53373
Thermal			
Vicat Softening Temperature, (A/50)	100	°C	ISO 306
Peak Melting Point	114	°C	ISO 11357-3

Optical

Haze, (50 µm)	<7 %	ASTM D1003
Gloss		
(20°)	>50	ASTM D2457
(60°)	>100	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
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