Technical Data Sheet

Lupolen 3020K

Low Density Polyethylene

Product Description

Lupolen 3020 K is a non-additivated, low density polyethylene. It is characterized by a good processability. LyondellBasell customers report that films made from *Lupolen* 3020 K exhibit a glossy surface finish. *Lupolen* 3020 K provides the option to produce films with very good optical properties.
It is delivered in pellet form.

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

Application	Food Packaging Film; Lamination Film; Shrink Film; Surface Protection Film
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film; Injection Molding
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)	4.0	g/10 min	ISO 1133-1
Density	0.928	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	300	MPa	ISO 527-1, -2
Tensile Stress at Yield	13	MPa	ISO 527-1, -2
Film			
Dart Drop Impact Strength, F50	90	g	ASTM D1709
Tensile Strength			
MD	20	MPa	ISO 527-1, -3
TD	17	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	350	%	ISO 527-1, -3
TD	600	%	ISO 527-1, -3
Coefficient of Friction	>0.8		ISO 8295
Impact			
Failure Energy	3.5	J/mm	DIN 53373
Thermal			
Vicat Softening Temperature, (A/50)	97	°C	ISO 306
Peak Melting Point	114	°C	ISO 11357-3
Optical			
Haze, (50 µm)	<7	%	ASTM D1003

Gloss		
(20°)	>80	ASTM D2457
(60°)	>115	ASTM D2457

Additional Information

Test Specimen	Film

Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 170°C and a blow-up ratio of 2.5:1.

Processing Parameters

Extrusion Temperature	150-190	°C