Technical Data Sheet

Lupolen 2420K

Low Density Polyethylene

Product Description

Lupolen 2420 K is a non-additivated, low density polyethylene. It is characterized by a good processability. Films made from *Lupolen* 2420 K exhibit good optical properties. It is delivered in pellet form.

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

Application	Coatings, Protective; Food Packaging Film; Hygiene Film; Shrink Film; Surface Protection Film
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film; Extrusion Coating; Injection Molding
Attribute	Good Heat Seal; Good Optical Properties; Good Processability

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	0.924	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	260	MPa	ISO 527-1, -2
Tensile Stress at Yield	11	MPa	ISO 527-1, -2
Film			
Dart Drop Impact Strength, F50	100	g	ASTM D1709
Tensile Strength			
MD	22	MPa	ISO 527-1, -3
TD	17	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	300	%	ISO 527-1, -3
TD	600	%	ISO 527-1, -3
Coefficient of Friction	>0.7		ISO 8295
Impact			
Failure Energy	3.5	J/mm	DIN 53373
Thermal			
Vicat Softening Temperature, (A/50)	92	°C	ISO 306
Peak Melting Point	111	°C	ISO 11357-3
Optical			
Haze, (50 µm)	<8	%	ASTM D1003

Gloss		
(20°)	>60	ASTM D2457
(60°)	>105	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

Blown Film Extrusion