



Lupolen 2421 K

Polyethylene, Low Density

Product Description

Lupolen 2421 K is an additivated, low density polyethylene. It contains an antioxidant and is delivered in pellet form.

Foodlaw compliance information about this product can be found in separate product documentation.

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

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, Asia-Pacific, Africa-Middle East
Processing Methods	Blown Film, Cast Film, Injection Molding
Features	Opticals, Good Processability
Typical Customer Applications	Blown Film, Cast Film, Film, Food Packaging Film, Shrink Film, Surface Protection Film

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.924	g/cm ³
Melt flow rate (MFR) (190°C/2.16kg)	ISO 1133	4.0	g/10 min
Mechanical			
Dart drop impact (50µm, Blown Film)	ASTM D 1709	100	g
Tensile Modulus	ISO 527-1, -2	260	MPa
Tensile Stress at Yield	ISO 527-1, -2	11.0	MPa
Tensile Strength	ISO 527-1, -3	22.0	MPa
Note: MD		17.0	MPa
Note: TD			
Tensile Strain at Break	ISO 527-1, -3	300	%
Note: MD		600	%
Note: TD			
Thermal			
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	92.0	°C
Melting Temperature	ISO 3146	111	°C
Optical			
Haze (50µm)	ASTM D 1003	<8	%
Gloss	ASTM D 2457		
(20°, 50µm)		>60	
(60°, 50µm)		>105	
Film			
Melt Temperature		150 to 190	°C

Additional Properties

Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 170°C and a blow-up ratio of 1:2.5.
Failure Energy, DIN 53373, 50µm: 3.5 J/mm
Coefficient of Friction, ISO 8295: >70%
Recommended Thickness: 15 to 40 µm

Notes

Typical properties; not to be construed as specifications.