

Technical Data Sheet

Lupolen 2421K

Low Density Polyethylene



Product Description

Lupolen 2421 K is an additivated, low density polyethylene. It is characterized by a good processability. Films made from Lupolen 2421 K exhibit good optical properties. It contains an antioxidant and 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 2421K [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Europe
Application	Food Packaging Film; Hygiene Film; Shrink Film; Surface Protection Film
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film
Attribute	Antioxidant; 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/cm ³	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 N)	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		

Notes

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