

Technical Data Sheet

Lupolen 2421H



Low Density Polyethylene

Product Description

Lupolen 2421 H is an additivated, low density polyethylene. It is characterized by a good balance between processability and mechanical properties. Films made from Lupolen 2421 H 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.

Application	Bags & Pouches; Food Packaging Film; Hygiene Film; Liner Film; Shrink Film
Market	Flexible Packaging
Processing Method	Blown Film; Cast Film
Attribute	Antioxidant; General Purpose; Good Heat Seal; Good Optical Properties; Good Processability

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	1.9	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	110	g	ASTM D1709
Tensile Strength			
MD	25	MPa	ISO 527-1, -3
TD	21	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	250	%	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)	94	°C	ISO 306
Peak Melting Point	111	°C	ISO 11357-3
Optical			
Haze, (50 µm)	<8	%	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	160-200 °C	