

Technical Data Sheet

Lupolen 2427F

Low Density Polyethylene

Product Description

Lupolen 2427 F is an additivated, low density polyethylene. It contains an antioxidant, slip and anti-blocking agent. It is characterized by a good melt strength leading to a good bubble stability during blown film extrusion. It 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; Shrink Film
Market	Flexible Packaging
Processing Method	Blown Film
Attribute	Antioxidant; Good Heat Seal; Good Melt Strength; Good Optical Properties; Good Processability; Low Friction; Unspecified Antiblocking; Unspecified Slip

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	0.75	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	150	g	ASTM D1709
Tensile Strength			
MD	24	MPa	ISO 527-1, -3
TD	22	MPa	ISO 527-1, -3
Tensile Strain at Break			
MD	300	%	ISO 527-1, -3
TD	600	%	ISO 527-1, -3
Coefficient of Friction	<0.2		ISO 8295
Impact			
Failure Energy	5.5	J/mm	DIN 53373
Thermal			
Vicat Softening Temperature, (A/50)	96	°C	ISO 306
Peak Melting Point	111	°C	ISO 11357-3
Optical			
Haze, (50 µm)	<8	%	ASTM D1003

Gloss			
(20°)	>40		ASTM D2457
(60°)	>90		ASTM D2457
Additive			
Slip, Erucamide	500	ppm	LYB Method
Antiblock, Natural Silica	900	ppm	ISO 3451-1
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	170-220 °C		