

Lupolen 2427 K

Low Density Polyethylene
LyondellBasell Industries

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Technical Data

Product Description

Lupolen 2427 K is an additivated, low density polyethylene. It contains an antioxidant, slip and anti-blocking agent. It 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.

General

Material Status	• Commercial: Active		
Literature ¹	• Processing - Mold Shrink (English) • Processing - PE Films (English) • Processing - Polyolefin Injection Molding Guide (English) • Technical Datasheet (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Lupolen		
Availability	• Africa & Middle East	• Asia Pacific	• Europe
Additive	• Antiblock: 1800 ppm ²	• Antioxidant	• Erucamide Slip: 600 ppm
Features	• Antiblocking • Antioxidant	• Good Optical Properties • Good Processability	• Low Friction • Slip
Uses	• Bags • Blown Film • Cast Film	• Film • Food Packaging • Industrial Applications	• Packaging • Shrink Wrap
Forms	• Pellets		
Processing Method	• Blown Film	• Cast Film	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.924 g/cm ³	0.924 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	37700 psi	260 MPa	ISO 527-2
Tensile Stress (Yield)	1600 psi	11.0 MPa	ISO 527-2
Coefficient of Friction (Blown Film)	< 0.20	< 0.20	ISO 8295
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Recommended / Available	15 to 40 µm	15 to 40 µm	
Tensile Strength			ISO 527-3
MD : 2.0 mil (50 µm), Blown Film	2760 psi	19.0 MPa	
TD : 2.0 mil (50 µm), Blown Film	2320 psi	16.0 MPa	
Tensile Elongation			ISO 527-3
MD : Break, 2.0 mil (50 µm), Blown Film	300 %	300 %	
TD : Break, 2.0 mil (50 µm), Blown Film	600 %	600 %	
Dart Drop Impact			ASTM D1709
2.0 mil (50 µm), Blown Film	100 g	100 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	198 °F	92.0 °C	ISO 306/A50
Melting Temperature (DSC)	232 °F	111 °C	ISO 3146
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss			ASTM D2457
20°, 1.97 mil (50.0 µm), Blown Film	> 50	> 50	
60°, 1.97 mil (50.0 µm), Blown Film	> 100	> 100	
Haze (1.97 mil (50.0 µm), Blown Film)	< 9.0 %	< 9.0 %	ASTM D1003
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Failure Energy ⁴ (2.0 mil (50.0 µm))	65.6 ft·lb/in	35.0 J/cm	DIN 53373



Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	302 to 374 °F	150 to 190 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Natural Silica

³ Typical properties: these are not to be construed as specifications.

⁴ Blown Film

