

Lupolen 2427 H

Low Density Polyethylene
LyondellBasell Industries

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Technical Data

Product Description

Lupolen 2427 H 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 • Antioxidant • Erucamide Slip: 500 ppm
Features	• Antiblocking • Good Processability • Good Optical Properties • Low Friction • Slip
Uses	• Bags • Film • Cast Film • Food 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)	1.9 g/10 min	1.9 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	< 0.20	< 0.20	ISO 8295
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.0 mil	50 µm	
Film Thickness - Recommended / Available	20-60 µm	20-60 µm	
Tensile Strength			ISO 527-3
MD : 2.0 mil (50 µm), Blown Film	3630 psi	25.0 MPa	
TD : 2.0 mil (50 µm), Blown Film	3050 psi	21.0 MPa	
Tensile Elongation			ISO 527-3
MD : Break, 2.0 mil (50 µm), Blown Film	250 %	250 %	
TD : Break, 2.0 mil (50 µm), Blown Film	600 %	600 %	
Dart Drop Impact			ASTM D1709
2.0 mil (50 µm), Blown Film	110 g	110 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	201 °F	94.0 °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
Erucamide	0.050 %	0.050 %	DIN 51454



Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Failure Energy (2.0 mil (50.0 µm))	74.9 ft·lb/in	40.0 J/cm	DIN 53373
Natural Silica	0.10 %	0.10 %	ISO 3451-1
Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 1:2.5.			

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	320 to 392 °F	160 to 200 °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 Typical properties: these are not to be construed as specifications.

