

Lupolen 5261 Z HI

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Lupolen 5261 Z HI is a high density polyethylene with outstanding impact resistance, high rigidity, good chemical resistance and good ESCR. It is delivered in powder form and contains antioxidants. Typical customer applications include L-ring drums for the packaging of dangerous goods.

Lupolen 5261 Z HI 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 - ISO (English)		
Search for UL Yellow Card	• LyondellBasell Industries • Lupolen		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	
Additive	• Antioxidant		
Features	• Antioxidant • Good Chemical Resistance	• High ESCR (Stress Crack Resist.) • High Impact Resistance	• High Rigidity
Uses	• Blow Molding Applications • Drums	• Industrial Applications • Packaging	
Forms	• Powder		
Processing Method	• Extrusion Blow Molding		

Physical	Nominal Value Unit	Test Method
Density	0.954 g/cm ³	ISO 1183
Apparent Density	> 0.46 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	2.0 g/10 min	ISO 1133
FNCT - 3.5 MPa ³ (80°C)	12.0 hr	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	1200 MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	28.0 MPa	ISO 527-2
Tensile Strain (Yield)	8.0 %	ISO 527-2

Impact	Nominal Value Unit	Test Method
Tensile Impact Strength (-30°C)	280 kJ/m ²	ISO 8256/1A

Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness (H 132/30)	52.0 MPa	ISO 2039-1

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	75.0 °C	ISO 75-2/B
1.8 MPa, Unannealed	44.0 °C	ISO 75-2/A
Vicat Softening Temperature	133 °C	ISO 306/A50

Electrical	Nominal Value Unit	Test Method
Electric Strength ⁴	> 150 kV/mm	IEC 60243-1

Additional Information	Nominal Value Unit	Test Method
Staudinger Index - Jg	500 cm ³ /g	ISO 1628

Extrusion	Nominal Value Unit
Melt Temperature	190 to 220 °C