

Lupolen 5261 Z

High Density Polyethylene
LyondellBasell Industries

Technical Data

Product Description

Lupolen 5261 Z is a high density polyethylene with high impact resistance, high rigidity, high chemical resistance and good ESCR. It is delivered in powder form and contains antioxidants. Typical customer applications include open top drums and jerry cans for the packaging of dangerous goods. Lupolen 5261 Z 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 Density	• High ESCR (Stress Crack Resist.) • High Impact Resistance • High Rigidity	• Med.-Wide Molecular Weight Distrib.
Uses	• Blow Molding Applications • Drums	• Industrial Applications • Jerricans	• 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)	27.0 MPa	ISO 527-2
Tensile Strain (Yield)	9.0 %	ISO 527-2
Impact	Nominal Value Unit	Test Method
Tensile Impact Strength (-30°C)	250 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 --	132 °C	ISO 306/A50
--	80.0 °C	ISO 306/B50
Melting Temperature (DSC)	134 °C	ISO 3146
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	475 cm ³ /g	ISO 1628
Extrusion	Nominal Value Unit	
Melt Temperature	190 to 220 °C	