

Lupolen 5261 ZS

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Lupolen 5261 ZS is a high density polyethylene with high ESCR, high impact resistance, high rigidity and high chemical resistance. It is delivered in powder form and contains antioxidants. Typical customer applications include drums and jerry cans for the packaging of dangerous goods. Lupolen 5261 ZS 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 • Latin America	
Additive	• Antioxidant		
Features	• Antioxidant • Good Chemical Resistance	• High ESCR (Stress Crack Resist.) • High Impact Resistance	• High Rigidity
Uses	• Blow Molding Applications • Drums	• Jerricans • Packaging	
Forms	• Powder		
Processing Method	• Extrusion Blow Molding		

Physical	Nominal Value Unit	Test Method
Density	0.951 g/cm³	ISO 1183
Apparent Density	> 0.46 g/cm³	ISO 60
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	2.0 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance ³ 80°C, 2% Igepal	20.0 hr	ISO 16770
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	1000 MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	26.0 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/m²	ISO 8256/1A
Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness (H 132/30)	47.0 MPa	ISO 2039-1
Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature 0.45 MPa, Unannealed	74.0 °C	ISO 75-2/B
1.8 MPa, Unannealed	42.0 °C	ISO 75-2/A
Vicat Softening Temperature		
--	130 °C	ISO 306/A50
--	78.0 °C	ISO 306/B50
Melting Temperature (DSC)	133 °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 cm³/g	ISO 1628