

Lupolen 4261 A Q 149

High Density Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Lupolen 4261 A Q149 is a high density polyethylene with an outstanding ESCR, good chemical resistance and high impact resistance. It is delivered in powder form without any additives. Typical customer applications include IBC, drums and jerry cans for the packaging of dangerous goods. Lupolen 4261 A Q149 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	• North America
Features	• Good Chemical Resistance	• High ESCR (Stress Crack Resist.)	• High Impact Resistance
Uses	• Blow Molding Applications • Drums	• Industrial Applications • Jerricans	• Packaging
Forms	• Powder		
Processing Method	• Extrusion Blow Molding		

Physical	Nominal Value Unit	Test Method
Density	0.945 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	6.0 g/10 min	ISO 1133
FNCT - 3.5 MPa, 2% Igepal BC/9 (80°C)	2.5 day	ISO 16770
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	850 MPa	ISO 527-2
Tensile Stress (Yield)	24.0 MPa	ISO 527-2
Tensile Strain (Yield)	10 %	ISO 527-2
Impact	Nominal Value Unit	Test Method
Tensile Impact Strength (-30°C)	170 kJ/m²	ISO 8256/1A
Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness (H 132/30)	40.0 MPa	ISO 2039-1
Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	70.0 °C	ISO 75-2/B
1.8 MPa, Unannealed	42.0 °C	ISO 75-2/A
Vicat Softening Temperature		
--	125 °C	ISO 306/A50
--	75.0 °C	ISO 306/B50
Melting Temperature (DSC)	130 °C	ISO 3146
Additional Information	Nominal Value Unit	Test Method
Staudinger Index	370 cm³/g	ISO 1628

Extrusion	Nominal Value Unit
Melt Temperature	180 to 220 °C

Extrusion Notes

Processing temperature range: 180 - 200 °C. As product does not contain antioxidants it should be processed at lowest possible temperature and by using inert gas in the hopper in order to reduce contact with oxygen which might lead to degradation.