

Lupolen 4261A IMBD

High Density (HMW) Polyethylene

LyondellBasell Industries

Technical Data

Product Description

Lupolen 4261 A IM BD is a high molecular weight high density polyethylene (HDPE). Typical customer applications include components for automotive fuel tank applications if outstanding biodiesel durability is requested. It is supplied in pelletized form and is stabilized with antioxidants for the injection molding process.

The product features an outstanding Environmental Stress Cracking Resistance (ESCR), good chemical resistance in combination with an excellent low temperature impact resistance. Typical processes include injection moulding. Physical properties and process ability are very close to Lupolen 4261 A IM.

Lupolen 4261 A IM BD is not intended for use in medical and pharmaceutical applications. The product can not be used for food contact 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
Additive	• Antioxidant		
Features	• Antioxidant • Good Chemical Resistance • Good Processability	• High ESCR (Stress Crack Resist.) • High Impact Resistance • High Molecular Weight	• Low Temperature Impact Resistance
Uses	• Fuel Tanks	• Tanks	
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	0.940 g/cm ³	ISO 1183
Apparent Density	> 0.50 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	15 g/10 min	ISO 1133
FNCT ³ (80°C)	1.5 day	ISO 16770

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	800 MPa	ISO 527-2
Tensile Stress (Yield)	21.0 MPa	ISO 527-2
Tensile Strain (Yield)	10 %	ISO 527-2

Impact	Nominal Value Unit	Test Method
Tensile Impact Strength (-30°C)	140 kJ/m ²	ISO 8256/1B

Thermal	Nominal Value Unit	Test Method
Melting Temperature (DSC)	130 °C	ISO 3146

Injection	Nominal Value Unit
Processing (Melt) Temp	230 to 280 °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.

³ 3.5 MPa, 2% Igepal BC/9