

Technical Data Sheet

Lupolen 4261A IMBD

High Density Polyethylene



Product Description

Lupolen 4261A IMBD is a high molecular weight high density polyethylene. 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 4261A IMBD is not intended for use in medical and pharmaceutical applications. The product can not be used for food contact applications.

Application	Fuel Tanks; Non-fuel Reservoirs
Market	Automotive
Processing Method	Injection Molding
Attribute	Antioxidant; Biodiesel durability; High ESCR (Environmental Stress Cracking Resistance); High Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/21.6 kg)	15.0	g/10 min	ISO 1133-1
Density	0.940	g/cm ³	ISO 1183-1
Bulk Density	>0.500	g/cm ³	ISO 60
Mechanical			
Tensile Modulus	800	MPa	ISO 527-1, -2
Tensile Stress at Yield	21	MPa	ISO 527-1, -2
Tensile Strain at Yield	10	%	ISO 527-1, -2
FNCT, (3.5 MPa, 2% Arkopal N100, 80 °C)	35	hr	ISO 16770
Impact			
Tensile Impact Strength	140	kJ/m ²	ISO 8256
Note: notched, type 1, method A, -30 °C			
Thermal			
Peak Melting Point	130	°C	ISO 11357-3
Processing Parameters			
Melt Temperature	>=230	°C	

