

Technical Data Sheet

Lupolen 4261AG UV60005

High Density Polyethylene



Product Description

Lupolen 4261AG UV60005 is a high density polyethylene with outstanding ESCR, high impact resistance and good chemical resistance. It is delivered in pellet form and contains antioxidants and a UV-stabiliser. Typical customer applications include Intermediate Bulk Containers (IBC) for the packaging of dangerous goods and heating oil tanks.

Lupolen 4261AG UV60005 is not intended for use in medical and pharmaceutical applications.

Application	Heating Oil Tanks; Industrial Packaging; Intermediate Bulk Containers
Market	Industrial Packaging
Processing Method	Extrusion Blow Molding
Attribute	Antioxidant; Good Chemical Resistance; Good Creep Resistance; High ESCR (Environmental Stress Cracking Resistance); High Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/5.0 kg)	0.35	g/10 min	ISO 1133-1
(190 °C/21.6 kg)	6.0	g/10 min	ISO 1133-1
Density	0.945	g/cm ³	ISO 1183-1
Bulk Density	>0.500	g/cm ³	ISO 60
Intrinsic Viscosity	370	ml/g	ISO 1628-3
Mechanical			
Tensile Modulus	850	MPa	ISO 527-1, -2
Tensile Stress at Yield	24	MPa	ISO 527-1, -2
Tensile Strain at Yield	10	%	ISO 527-1, -2
FNCT, (3.5 MPa, 2% Arkopal N100, 80 °C)	60	hr	ISO 16770
Impact			
Tensile Impact Strength	170.0	kJ/m ²	ISO 8256
Note: notched, type 1, method A, -30 °C			
Hardness			
Ball Indentation Hardness, (H 132/30)	40	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(A/50 N)	125	°C	ISO 306
(B50)	75	°C	ISO 306
Deflection Temperature Under Load			
(0.45 MPa, Unannealed)	70	°C	ISO 75B-1, -2
(1.80 MPa, Unannealed)	42	°C	ISO 75A-1, -2
Peak Melting Point	130	°C	ISO 11357-3
Processing Parameters			
Melt Temperature	180 - 220	°C	
For blow molding process.			

