

Lupolen 4261 AG

Polyethylene, High Density

Product Description

Lupolen 4261AG is a high molecular high density Polyethylene (HDPE) typically used by our customers for automotive fuel tank applications. It is supplied in pellets and is stabilised with antioxidants for the extrusion process. The product features an outstanding ESCR (Environment Stress Crack Resistance), good chemical resistance in combination with an excellent low temperature impact resistance. Typical processes include blow moulding and thermoforming.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO ASTM
Availability	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Method	Extrusion Thermoforming, Extrusion Blow Molding
Features	Antioxidant, High ESCR (Environmental Stress Cracking Resistance), High Impact Resistance
Typical Customer Applications	Fuel Tanks, Non-fuel Reservoirs

Typical Properties	Method	Value Unit
Physical		
Density	ISO 1183	0.945 g/cm ³
<i>Note: at 23°C</i>		
Bulk density	ISO 60	> 500 g/cm ³
Melt flow rate (190/21,6)	ISO 1133	6 g/10 min
FNCT (3.5 MPa, 2% Igepal BC/9, 80°C)	ISO 16770	80 h
Mechanical		
ESCR	ASTM D 1693	1000 h
<i>Note: Method B</i>		
Flexural modulus	ISO 178	1100 MPa
Tensile Impact Strength	ISO 8256	170 kJ/m ²
<i>Note: -30 °C, notched, Method 1/B</i>		
<i>Note: +23 °C, notched, Method 1/B</i>		
250 kJ/m ²		
Elongation at yield	ISO 527	10 %
<i>Note: Method 2</i>		
Tensile stress at yield	ISO 527	24 MPa
<i>Note: Method 2</i>		
Tensile modulus	ISO 527	900 MPa
Impact		
Notched izod impact (-30 °C, mm, Method 1A)	ASTM D 256	300 J/m
Thermal		
Melting Temperature	ISO 3146	131 °C
Vicat softening temperature A/50	ISO 306	126 °C
Oxidation induction time (OIT) (200°C)	ISO 11357-6 / EN 728	50 min

Additional Properties

Processing: Recommended melt temperatures: 180-240 °C.

Notes

Typical properties; not to be construed as specifications.